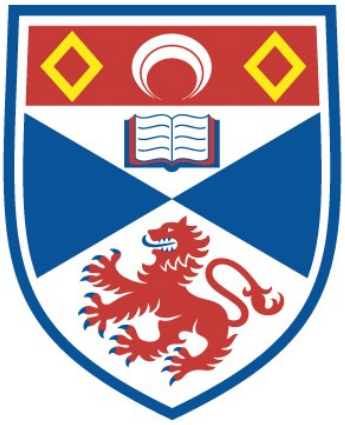
EMOTIONAL STATE, EVENT-RELATED IMPACT AND BLAME COGNITIONS : A STUDY OF SECONDARY VICTIMS OF MURDER

Ann-Stacy Kahler Rowland

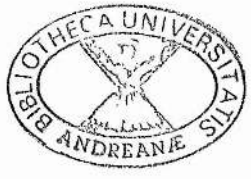
A Thesis Submitted for the Degree of PhD
at the
University of St Andrews



1998

Emotional State, Event-Related Impact and Blame Cognitions: A Study of Secondary Victims Of Murder

Ann-Stacy Kahler Rowland



Thesis submitted to the University of St Andrews for the Degree of Doctor of Philosophy, April 1998

DECLARATIONS

I, Ann-Stacy Kahler Rowland, hereby certify that this thesis, which is approximately 70,000 words in length, has been written by me, and that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

Date 1 June 1998 **Signature of candidate**.....

I was admitted as a research student in October 1994, and as a candidate for the degree of Ph.D. in October 1995; the higher study for which this is a record was carried out in the University of St Andrews between 1994 and 1998.

Date 1 June 1998 **Signature of candidate**.....

I hereby certify that the candidate has fulfilled the conditions of the Resolution and Regulations appropriate for the degree of Ph.D. in the University of St Andrews and that the candidate is qualified to submit this thesis in application for that degree.

Date 12/6/98 **Signature of supervisor**.....

In submitting this thesis to the University of St Andrews I understand that I am giving permission for it to be made available for use in accordance with the regulations of the University Library for the time being in force, subject to any copyright vested in the work not being affected thereby. I also understand that the title and abstract will be published, and that a copy of the work may be made and supplied to any bona fide library or research worker.

Date 1 June 1998 **Signature of candidate**.....

DEDICATION

This thesis is dedicated to the families, those involved and not involved with *Families of Murdered Children*, who have experienced the most traumatic of all traumatic events - the senseless murder of a loved one. I am in debt to them for their open and honest attitudes to my research and their patient participation. Without their continued support, this research would never have been possible.

ACKNOWLEDGEMENTS

Where to begin? There are so many people who have been involved in my life and my Ph.d. over the past four years, I can only hope to remember to include everyone who so deservedly merit mention.

I would like to thank several people from *Families of Murdered Children*, without whose kind support and assistance, this research would never have been possible. Mrs. Margaret Watson, who through her own tragic loss and pain, started the organisation and gave endless support to my research. Miss AnnMarie McGloine who worked so tirelessly to provide me with necessary information about the support group, handed out my research information to clients at support meetings and made endless cups of tea and coffee for the clients and myself during the long interviews. I hope you find the peace you deserve. Mrs. Jean Barclay, who found the strength to provide support and information after having suffered such a terrible loss. Mr. Andrew Wilson, who always gave me the encouragement to continue my work, even after his tragic loss. My sincerest thanks to you all.

I would like to thank, more than she will ever know, Professor Marie Johnston. I am truly appreciative of her acceptance to become my supervisor in the middle of my third year - not a great time to take over supervision of a student from a totally different field of research. I am completely amazed at how bright she really is! Thank you for all of your guidance and encouragement - you always knew when I needed a boost to my ever-dwindling confidence. I would never have been able to write this page if it hadn't been for you!

My parents and sister, Lisa, deserve a big round of thanks for all of their encouragement. I would never have embarked on this adventure had it not been for the three of them. They gave me the confidence to pursue this Ph.d. by urging me to following my instincts and dreams. How can I ever repay you or thank you enough? Impossible, I'm afraid!

There have been so many people who have made my life interesting and pleasing while being in St. Andrews. When I first arrived, I was made to feel very welcome by a great bunch of people from the department - Mr. Paul Gardner, Dr. Mike Oram, Dr. Dave Carey and Dr. Duncan Rowland (more on him in a moment) who provided me with an in-depth introduction to the pub and its importance to intellectual stimulation. Dr. Rebecca Bull has been a great comfort and friend over the years providing loads of laughs, lots of stats help, and just being fun; remember the Christmas party with the shaving foam?!. Most importantly, I'm sure she

helped me to remain sane during our first year! Others to thank include Dr. Kate Harrison (I'm glad you hug now!), Dr. Tim Jordan (I love your giggle), Dr. Sharon Thomas (I'm glad we *finally* met - I think you're great!), and Kieran Lee (are you a Dr. yet?). Professor Dave & Anne Perrett have provided many wonderful parties, hours of fun and great nights out. They have both been tremendously supportive of Duncan and me - I consider them two of my dearest friends! I thank you all from the bottom of my heart!

Helen Glenister and Linda Turnbull greatly deserve a big thanks. The hours of laughs, drinks, great nights, advice and counselling and hours of girl talk have made the last four years a brilliant experience for me. I have made two truly great friends.

Then there's Pokey. What can I say? You've been a major source of comfort to me throughout the months of finishing. I never felt alone and you gave me the strength to persevere. I can only hope to be as much of an inspiration to you as you have been and are to me.

Last, but not least, I must thank my husband Duncan Rowland. Without all of his on-going love and support, I'm not sure I would have stuck it out and finished this Ph.d. He has provided me with a wonderful life, full of excitement and joy and made me realise that coming to St. Andrews to do my Ph.d. was the best decision I could ever have made! I love you.

TABLE OF CONTENTS

ABSTRACT

Previous studies have found a relationship between attributions of blame and traumatic events such as crime, illness, and accidents/disasters, albeit inconclusive as to the benefits or detriments of self- and other-blame on adjustment outcome (e.g., Janoff-Bulman, 1979; Joseph, Brewin, Yule & Williams, 1991, 1993; Derry & McLachlan, 1995; Frazier & Schauben, 1994). The effects of attributions of blame on the adjustment outcome of family members bereaved through murder has been neglected. Therefore, little is known about such benefits to adjustment in this population. In addition, no longitudinal research has been conducted so little is known about this process of adjustment.

A retrospective longitudinal study investigated emotional state and event-related impact, attributions of blame, control and just world cognitions, revenge and disabling distress. Thirty-four family members, recruited from "Families of Murdered Children", were interviewed and completed four psychological measures. They were followed up six and twelve months later.

On all three occasions, subjects showed high levels of negative emotional state and event-related impact, especially older, female and support seeking subjects. Self-blame and feelings of revenge were linked to higher levels of negative emotional state and event-related impact, especially in female subjects. Control and just world cognitions were not related to emotional state and event-related impact.

Negative emotional state at Time 1 was predictive of poor overall adjustment at Time 2 and Time 3, while gender was predictive of poor overall adjustment at Time 2. Subjects suffering from distress that interfered with their daily lives at Time 3 had higher negative emotional state and event-related impact at Time 1, Time 2 and Time 3.

In order to further investigate the effects of blame attributions on mood, a randomised between-subjects laboratory study was conducted. Eighty-seven undergraduates were assigned to one of three writing conditions (self-blame, other-blame and no blame/control) with mood being assessed before and after writing. Results showed that negative mood had been cognitively induced, however, no condition effects occurred. The mood effect was greater for women than men.

Implications for theory, practice and future research in relation to the main findings are discussed.

CHAPTER 1

GENERAL INTRODUCTION

This thesis provides an examination of the victimisation and adjustment processes of family members bereaved through murder who are known in research as secondary victims of murder. These victims have been sporadically researched over the last ten years and this research has shown the deleterious psychological effects of such a victimisation. The interest in researching this population appears to have waned recently and most of the research conducted with this population is based on observations and interactions rather than empirical work. Therefore, little research has been conducted which tests theories relating to the adjustment process of other traumatic events.

This thesis has been conceptualised within the framework of the literature examining traumatic events such as other crime, illness and accidents/disasters due to the vast amount of existing research, and the paucity of such research with secondary victims of murder (Chapters 2 & 3). Key issues investigated in this thesis include the effects on emotional state and event-related impact, attributions of blame and their associations with emotional state and event-related impact, and other cognitions such as control cognitions and feelings of revenge which may affect the adjustment process. These issues have not previously been researched in secondary victims of murder possibly due to the difficulty in accessing such a group and in addition, the sensitivity of their situation. The opportunity became available for this investigation through the co-operation of a support group for family members bereaved through murder (Families of Murdered Children).

In order to investigate the emotional state and event-related impact, attributions of blame and other cognitions (control, just world, revenge), a cross sectional study was designed which incorporated an interview, with open and closed questions, and the use of standardised measures. In addition, qualitative analyses are used in order to further illustrate the quantitative findings regarding the above psychological variables. This study, including the methodology and results, is presented in Chapter 4.

Due to the extended co-operation of the support group, the opportunity presented itself to investigate the key issues longitudinally over a period of twelve months (see Chapter 5). Longitudinal research with secondary victims of murder has not been conducted and therefore, little is known about the adjustment process to such a victimisation over time. In

order to avoid overburdening the family members, only the standardised measures were completed at six months after the initial interview. At twelve months after the interview, however, a one-year follow-up questionnaire which mirrored the interview, as well as the standardised measures, were completed. This study allowed the investigation of changes over time in emotional state and event-related impact, attributions of blame, control cognitions, just world beliefs and feelings of revenge; whether significant findings related to emotional impact and even-related impact, attributions of blame and cognitions (control, just world, revenge) from the cross-sectional study persevere or dissipate over time at six and twelve months after the initial assessment; the extent to which subject/crime characteristics, attributions of blame, feelings of revenge, and emotional state and event-related impact predict adjustment outcome; and whether distress that interferes with daily life is present at twelve months after the initial interview. Data collected at six months and twelve months after the initial interview are analysed in order to provide a more in-depth insight into the long-term adjustment process of family members bereaved through murder.

As the cross-sectional and longitudinal studies could examine only the associations and predictions between the psychological variables of emotional state and attributions of blame, causal mechanisms could not be investigated. Therefore, an exploratory laboratory study was designed and conducted in order to determine if attributions of blame cause emotional state (see Chapter 6). The randomised between-subjects design laboratory study investigates the cognitive induction of blame attributions (self-blame, other-blame, and no blame) and the effects of such attributions on subsequent mood. By determining whether attributions of blame cause emotional state a better understanding could be gained as to the role of attributions of blame in the adjustment process to traumatic events.

Main findings from the empirical chapters are discussed in order to draw the thesis together (see Chapter 7). In addition, implications for theory and practice are provided to illustrate how this research has added to the existing research and issues in practice. Further, ideas for future research are presented to show in what direction the field should move in order to provide a better understanding of how the psychological variables of attributions of blame and emotional state are involved in traumatic events.

CHAPTER 2

THE ROLE OF ATTRIBUTIONS IN TRAUMATIC EVENTS

INTRODUCTION

Research investigating attributions has been of great interest to social psychologists and the vast amount of psychological literature spans the last fifty years. Domains in which attributions have been researched include: victims of crime (e.g., Winkel, Denkers & Vrji, 1994), victims of illness (e.g., Timko & Janoff-Bulman, 1985) and victims of accidents (e.g., Joseph, Brewin, Yule & Williams, 1991). Attributions contain different components as stated in the reformulated theory of learned helplessness (Abramson, Seligman, & Teasdale, 1978). They can be internal (based on the person) or external (based on another person, the environment or chance). Attributions are also described as being either stable (persisting) or unstable (temporary). Attributions can be further classified as global (affecting other areas) or specific (pertaining only to the event in question). The exact combination of these factors leads to a wide variety of possible attributions with different consequences and outcomes.

A major topic in attribution theory pertains to how specific attributions of responsibility and blame affect adjustment and outcomes to negative events. McArthur (1972) states that "...identifying the cause of an event gives it 'meaning', since causal knowledge carries with it a wide scope of connotations regarding an event and makes possible a more or less stable, predictable, and controllable world"(pg. 171). The search for meaning for a traumatic event is a prevalent and adaptive process (Silver, Boon & Stones, 1983). The need for a world which is stable, predictable and controllable appears to be an important part of a personal belief system, especially when confronted with a traumatic event. Miller and Porter (1983) suggest that there are three psychological needs met when attributing blame, especially self-blame: the need for perceived control, the need for effective control and to bring meaning to traumatic events. Wong & Weiner (1981) suggest that the search for the causal meaning or explanation for an event is "...most likely when the outcome of an event is negative and unexpected" (pg. 650). Similarly, Shaver & Drown (1986) suggest that beliefs about responsibility and blame are assigned "...only after the occurrence of events with negative consequences" (pg. 701).

The content of attributions may have a direct affect on how well people cope and adjust when faced with negative events such as crime, accident and illness. Little is known

about the attributional process and subsequent adjustment of secondary victims of murder. Therefore, it is necessary to examine the existing attribution literature conducted with victims of other crimes, illness/health-related problems and accidents in order to gain a better understanding of this process and to determine the role attributions play in the adjustment process. By so doing, hypotheses and predictions can be formed concerning the role of attributions in the coping and adjustment of secondary victims of murder.

Definitions of Responsibility and Blame

In the attribution theory literature, research conducted on the assignment of responsibility and blame offer conflicting empirical findings. The majority of discrepancies result from researchers using the terms responsibility and blame interchangeably (Shaver & Drown, 1986). This leads to the difficulty in comparing the results from one study to another. Shaver and Drown (1986) stress the importance of keeping these terms distinct so that accurate comparisons can be made. *Responsibility* is defined as "...a label applied to the outcome of a process"(pg. 701). Further, they define *blame* as "...the attribution made after the perceiver assesses and does not accept the validity of the offending person's justification or excuse that the perceiver believes was intentionally brought about"(pg. 701). In other words, *blame* involves the element of intentionality, whereas *responsibility* does not necessarily. Tennen & Affleck (1990), however, do not believe that victims identify the differences between these terms when making attributions and subsequently, use the terms interchangeably.

Responsibility Attributions

Research has been conducted on attributions of responsibility for accidents and the consequences of these attributions on adjustment. Walster (1966) investigated the assignment of responsibility for an accident. She hypothesised that as the severity of consequences increase in an accident, more responsibility for the occurrence of the accident would be assigned. In her experiments, subjects listened to taped scenarios describing a person who had an accident and assigned responsibility. Four conditions were established: (1) person involved in accident suffers and damage to car is trivial, (2) person involved in accident suffers and damage to car is severe, (3) additional persons suffer and damage is trivial, and (4) additional persons suffer and damage is severe. Results from the experiment supported the hypothesis.

Subjects assigned more responsibility to the offender when the consequences for the accident were severe than when trivial. Walster stated that "...if we can categorise a serious accident as in some way the victim's fault, it is reassuring"(pg. 74). In other words, we can protect ourselves from catastrophe by telling ourselves that we are different from the victim or that we would act differently from the victim if placed in a similar situation.

Building on this concept, Shaver (1970) attempted to replicate Walster's findings (although Walster (1966) had subsequently failed to replicate her own results). Shaver proposed that the level of similarity of the stimulus person and the relevance of the situation would affect assignment of responsibility when severity was manipulated. If people do not believe a situation is relevant to them "...there would be little or no threat, and consequently no need to assign responsibility" (pg. 103). Shaver conducted three experiments (which involved subjects reading scenarios or listening to taped scenarios of an accident) to test the idea that severity of outcome and relevance would affect attributions of responsibility for an accident. The first experiment manipulated age of the stimulus person, the second experiment manipulated age and status of the stimulus person, and the third experiment manipulated severity of consequences of the accident. In experiment 1, Shaver found that more severe consequences did not produce assignment of more responsibility. In experiment 2, results showed that when subjects felt similar to the stimulus person, they attributed less responsibility and were more lenient in other judgements. In experiment 3, only severity was manipulated and results failed to show that in high similarity situations, more responsibility was assigned, as Walster (1966) had found. Overall, results demonstrated that the more similar the observer was to the stimulus person, the less responsibility was allocated. Situations which had greater relevance to the observer (e.g., observer could easily see themselves in a similar situation) brought about more lenient judgements ascribed to the stimulus person. A tendency towards self-protection emerged which included the avoidance of harm and the avoidance of blame. This concept provides the basis for Shaver's defensive attribution theory. The theory states that when people believe that a situation or another person's actions which lead to negative consequences could happen to them, they desire to avoid blame and harm. Therefore, they will refuse to attribute increased blame and responsibility even when the consequences of the actions in question are severe.

Defensive attribution theory is similar to the Just World hypothesis in the sense that people believe others get what they deserve. Lerner and Simmons (1966) state that there are three agents of suffering: prior behaviour, low perception of self-worth, and chance. When you are a victim, you can be confident of your prior and current behaviour and your self-

worth, but not chance. Consequently, chance is denied and the Just World hypothesis becomes salient.

Burger (1981) reviewed twenty-two experimentally presented studies involving assignment of responsibility and found a weak yet significant trend to apply more responsibility to a perpetrator when the accident outcome was severe. Chaikin and Darley (1973) found in their experimentally presented study that people attribute more responsibility to a perpetrator of an accident when the observer is situationally similar and personally dissimilar to the perpetrator. The hesitance to blame a perpetrator who is situationally similar to the observer happens more when the consequences of the accident are severe. Shaw and McMartin (1974) also found, in their experiment which included situation and personal similarity in an accident scenario as variables, that when personal relevance was low and situational relevance was high, enhanced assignment of responsibility occurred as the severity of the accident increased. In addition, McKillip and Posavac (1975) found that when subjects felt their attitudes were dissimilar to those of the perpetrator in a severe accident condition, more responsibility for the accident was designated.

In another study, Thornton (1984) reported that when a personal dissimilarity arises, subjects attribute more responsibility to the offender and apply characterological self-blame (blame assigned to the character traits of a person; things that are not easily changed). He further asserted that offenders are deemed less responsible and behaviourally blamed (blame assigned to the behaviour of a person) when a personal similarity emerges. Thornton concluded that both similarity, dissimilarity and the nature of blame influence defence against the threat of a negative event.

Self-Blame vs. Other-Blame Attributions

This section considers (a) the types of self-blame and other-blame attributions and (b) the effects of each type of blame on adjustment to the negative events of crime, illness and accidents/disasters. Table 2.1 presents the studies and the findings.

Crime

Self-Blame Beneficial

Janoff-Bulman (1979), in her influential research on blame and crime victims, made the distinctions between two types of self-blame: *behavioural self-blame* and *characterological self-blame*. Behavioural self-blame is based on one's behaviour and it is related to personal control. One is able to change one's behaviour which gives a stronger sense of control over the possibility of avoiding a future episode of an aversive event such as rape. On the other hand, characterological self-blame is based on one's character traits. It is not focused on the future, but instead on the past and what personal characteristics allowed the negative event to happen. It is related to self-esteem. In her first study in 1979, Janoff-Bulman tested the hypothesis that depressed individuals would use characterological self-blame more than non-depressed individuals. Undergraduate women completed three personality tests which included a depression measure, a self-esteem measure and a locus of control measure. Subjects also answered questions regarding the assignment of blame in four scenarios in which they were to pretend to be the target individual. Janoff-Bulman (1979) reported that depressed subjects reported more characterological self-blame than did non-depressed subjects. She asserted that characterological self-blame stems from attributions which lack personal control. The depressed subjects blamed negative events to chance and were more externally based. In her next study (1979), rape crisis counsellors were sent questionnaires assessing, in their opinion (actual rape victims were not consulted), the percentage of rape victims who they felt incorporated behavioural self-blame versus characterological self-blame. The rape crisis counsellors reported that self-blame occurred frequently. More behavioural self-blame was noted than characterological self-blame. It was also asserted that rape victims who attributed the rape to characterological self-blame blamed themselves more for the rape than did the rape victims who made behavioural self-blame attributions. Shaver and Drown

(1986), however, do not agree with the terminology used by Janoff-Bulman. They classify behavioural self-blame as actually a causal attribution. They further contend that characterological self-blame is actually an attribution of responsibility rather than blame, "...because it lacks the critical element of intentionality" (pg. 701).

Janoff-Bulman's findings are quite similar to the Just World hypothesis suggested by Lerner & Miller (1978). The Just World hypothesis states that good events happen to good people and *vice versa*. It is derived from a need to believe in an orderly, controlled world and that events do not occur by chance alone. When negative things happen, we attribute the cause to the victim's character. This distancing helps relieve distress concerning vulnerability by defining differences between ourselves and the victim. Victims would rather accept the blame for the crime than concede that negative events occur randomly and without reason.

In another study to assess the adaptiveness of behavioural self-blame in 'victims', Janoff-Bulman (1982) recruited undergraduate women to participate in her study. Subjects completed two personality assessments and were assigned to either a victim condition or an observer condition. Subjects in both conditions read accounts of actual rapes (the rapes detailed were acquaintance rapes and not stranger rape). Subjects in the victim condition were to react as if the victim in the scenario was herself and subjects in the observer condition were to react as if they were an observer. Subjects answered twelve questions regarding behavioural self-blame and characterological self-blame (six of each type). Results from the study indicated that behavioural self-blame was adaptive in that it was related to high self-esteem and beliefs about control over a rape occurring in the future for subjects in the victim condition. Low self-esteem subjects exhibited more characterological self-blame than high self-esteem subjects in the victim condition. Subjects in the victim condition also utilised behavioural self-blame more than the subjects in the observer condition.

Winkel, Denkers, and Vrji (1994) researched attributions of burglary victims. Subjects completed several scales from the Coping with Crime Monitor, which included: Fear of Crime Scale, Extreme Prevention Inventory and Burglary Prevention Inventory. Subjects also answered questions regarding control, future control and attributions. They found results which substantiate the findings of Janoff-Bulman. When burglary victims attributed the crime to external causes, they, "...focused on the negative or more problematic aspects of the event, resulting in stronger fear of crime and higher intentions to apply extreme preventive options" (pg. 160). Moreover, victims who ascribed behavioural self-blame focused on the positive points which included an increase in the belief in personal control over the event and caused the victims to strongly consider being more careful and preventive.

Self-Blame Detrimental

Meyer and Taylor (1986), however, in their study with rape victims report contrary findings concerning self-blame. They predicted, as did Janoff-Bulman, that behavioural self-blame would lead to better adjustment to rape than characterological self-blame. The results, which were based on questionnaires answered by fifty-eight rape victims, showed that no type of self-blame, neither behavioural nor characterological, was associated with positive adjustment. Both behavioural self-blame and characterological self-blame were actually negative. Behavioural self-blame was associated with lack of sexual satisfaction and depression and characterological self-blame was associated with increased fear of repeat victimisation and depression.

Peterson and Seligman (1983) have proposed that the reformulated theory of learned helplessness (Abramson, Seligman, and Teasdale, 1978) can be applied to crime victims to explain their attributions and subsequent adjustment. They posit, according to the reformulated theory, if people utilise internal, global and stable attributions for the cause of a negative event that this will result in a lowering of self-esteem. Contrary to Janoff-Bulman, this theory proposes that self-blame for a crime would lead to a decrease in self-esteem and would result in poorer adjustment.

Findings from Frazier's (1990) study of rape victim attributions are consistent with the model of learned helplessness proposed by Abramson, Seligman, and Teasdale (1978) which states that internal controllable attributions are related to increased depression. The study was conducted in order to determine if behavioural self-blame was related to a more positive adjustment to rape, as did Janoff-Bulman (1979). Subjects were ninety-eight women who had suffered a sexual assault. Subjects completed an attribution questionnaire at three days post-rape, three months post-rape, and six months post-rape and the Beck Depression Inventory to assess adjustment. Results indicated that women who have experienced sexual assault blamed themselves less than the rapist for the rape (other-blame). Behavioural self-blame was linked only with avoidability of the past rape, but not for future attacks, unlike Janoff-Bulman's (1979) hypothesis that behavioural self-blame would be positive because it affords the victim with the perception that future attacks could be prevented. Most importantly, both behavioural self-blame and characterological self-blame were linked to increased post-rape trauma and depression.

Frazier and Schauben (1994) investigated attributions of self-blame in fifty-nine rape victims. Subjects completed the Sexual Experiences Survey, used to determine the prevalence of rape; the Brief Symptom Inventory, to assess recovery; The McPearl Belief Scale, to determine beliefs about self and others; and answered questions regarding attributions and beliefs about control concerning rape. As they predicted, both behavioural self-blame and characterological self-blame were related to increased psychological symptoms. Frazier and Schauben (1994) reason that this occurred because victims themselves do not make the distinction between behavioural and characterological self-blame and may have difficulty in blaming their behaviour without in some way blaming their character. In addition, results showed that both behavioural self-blame and perceptions regarding past control were not related to beliefs about future control over rapes occurring, again inconsistent with Janoff-Bulman's (1979) findings and explanations.

In a study examining self-blame attributions and adjustment to sexual assault by Ullman (1996), one-hundred and fifty-five sexual assault victims completed a mailed survey which covered pre- and post-assault characteristics, self-blame, coping, social reactions and recovery. Results indicated that behavioural and characterolgical self-blame were not related to recovery or psychological symptoms, however, when time of disclosure was controlled for, blame was correlated with recovery. Increased blame was related to poorer self rated recovery.

In their study on attributions of blame for child sexual abuse and adult adjustment, McMillen and Zuravin (1997) interviewed one-hundred and fifty-four women who had suffered child sexual abuse. Subjects completed the Attributions of Responsibility and Blame Scales (developed for the study) to assess self-blame, family blame and perpetrator blame; the Rosenberg Self-Esteem Scale and the Relationship Questionnaire to assess adjustment. Results indicated that self-blame was related to poorer adjustment. High self-blame was related to decreased self-esteem and comfortableness with closeness and increased relationship anxiety. Perpetrator blame was not related to adjustment. Family blame was related to relationships anxiety and having a maltreated child.

Feinauer and Stuart (1996) examined attributions of blame and recovery from child sexual abuse in two-hundred-seventy-six women. Subjects completed a mailed questionnaire which included the Trauma Symptoms Checklist-33 (TSC-33) to assess trauma impact and four items from the Williams McPearl Coping Scale regarding attributions of blame, specifically self-blame and fate/bad luck blame. For analyses purposes, subjects were classified into differing blame categories based on their answers to the blame questions; self-blame,

fate/bad luck blame, blame both self and fate/bad luck, or perpetrator blame. Perpetrator blame was categorised as not blaming either self or fate/bad luck; there was no specific question assessing perpetrator blame. Results indicated that blame was related to increased scores on the TSC-33 for subjects who blamed themselves, blamed fate/bad luck and blamed both themselves and fate/bad luck. The opposite was found, however, for subjects who were assumed to blame the perpetrator. Subjects who blamed the perpetrator had lower scores on the TSC-33 than subjects who did not blame the perpetrator.

Hazzard, Celano, Gould, Lawry and Webb (1995) investigated psychological adjustment and self-blame attributions in fifty-six girls who had experienced sexual abuse and their female primary caretakers. Subjects were interviewed and completed several questionnaires. The child subjects completed the Kaslow's Attributional Style Questionnaire (KASTAN) to assess general attributional style; and the Children's Impact of Traumatic Events Scale-Revised (CITES-R). The caretaker subjects completed the Parental Reaction to Incest Disclosure Scale (PRIDS) to assess abuse related support; the Parental Attribution Style (PAS) to assess child blame; and the Child Behavior Checklist Parent Report Form (CBCL) to assess social competence and behaviour problems. In addition, the child subjects overall function was clinically evaluated by a psychiatrist with the Children's Global Assessment Scale (GAS). Results indicated that greater child self-blame was reported in younger children, children with a more depressed attributional style and in children whose caretakers blamed them. Results further suggested that more favourable adjustment on the GAS was related to lower levels of self-blame. Children who blamed themselves for the incest had lower adjustment scores as evaluated by the psychiatrist.

In sum, the findings from studies (see Table 1a) which used non-victim samples and victims from non-violent crimes (e.g., burglary) showed that self-blame is beneficial to the adjustment process. However, studies which used actual victims and victims of violent crime (e.g., rape) showed that self-blame is associated with poorer post-crime adjustment.

Illness and Health-Related Trauma

As stated previously, people search for causal explanations when faced with aversive events. It is hypothesised that causal attributions are made in order for people to feel they are in control of the situation and themselves (Kelley, 1973; Wong & Weiner, 1981). The need to find an explanation for the occurrence of a negative event appears to be important when

looking at illness attributions. Turnquist, Harvey and Andersen (1988) posit that when people are confronted with a life-threatening illness, they will instigate a causal search for the reason(s) why the illness occurred. They suggested that just world assumptions can be shattered when an illness or injury occurs. Subsequent attributions can provide evidence for a lack of belief or attempts to regain a sense of a just world.

Self-Blame Beneficial

Tennen, Affleck and Gershman (1986) explored the role of self-blame in mothers whose infants experienced perinatal complications. Fifty mothers were interviewed regarding their attributions for the complications. It was predicted that behavioural self-blame would occur when medical problems were severe and would result in better emotional adaptation. Results indicated that behavioural self-blame was positively related to perceptions of severity and to the belief in future prevention. This belief in control over the recurrence of complications in future pregnancies was associated with emotional adjustment. Tennen et al. (1986) also found that other blame was linked with an increased disturbance in mood, contrary to prediction.

Likewise, Chodoff, Friedman and Hamburg (1964) speculated that parents utilise self-blame when trying to account for causes for their dying children's illness so they could avoid the idea that the illness was due to chance and that they could not stop or control it from happening to their other children.

Timko and Janoff-Bulman (1985) investigated the role of attributions and vulnerability in relation to psychological adjustment in women who had undergone a mastectomy for breast cancer. It was predicted that causal attributions for the cancer would affect adjustment based

Table 1: Studies Measuring Self- and Other-Blame and Adjustment Outcome

Table 1a - Crime Studies

Study	Subjects	N	Measures	Outcome
Janoff-Bulman, 1979	college women	120	Zung Self-rating Depression scale; Janis-Field Feelings of Inadequacy scale; Rotter's Locus of Control scale; attributions of blame collected from self-scenarios	depressed subjects reported more characterological self-blame and blamed negative events to chance
	rape crisis centre counsellors	38 *	questionnaire assessing behavioural & characterological self-blame in rape victims	more behavioural self-blame reported; victims who used characterological self-blame blamed themselves more for the rape
Janoff-Bulman, 1982	college women	168	Rotter's Locus of Control scale; Revised Janis-Field Feelings of Inadequacy scale; attributions of blame assessed from self-scenarios depicting rape cases	behavioural self-blame adaptive because it was related to self-esteem and beliefs of control over future rapes; low self-esteem subjects exhibited more characterological self-blame than high self-esteem subjects
Winkel, Denkers, & Vrji, 1994	burglary victims	165	several scales from the Coping with Crime Monitor; attributions and beliefs of control collected from answers to questions	subjects who blamed external factors were more negative, had increased fear of crime, and had higher intentions to be extremely preventative; subjects who used behavioural self-blame were more positive and believed had more control over future events

(table continued)

*** questionnaires sent to rape crisis centres; it is not known exactly how many individuals were involved**

Table 1a - Crime Studies

Study	Subjects	N	Measures	Outcome
Meyer & Taylor, 1986	rape victims	58	questionnaires assessing blame for the rape	no type of self-blame associated with positive adjustment
Frazier, 1990	rape victims	98	questionnaire on attributions 3 days, 3 months and 6 months post-rape; Beck's Depression Inventory	subjects blame rapists more than themselves; behavioural self-blame linked with avoidability of past rape, but not future attacks; both behavioural and characterological self-blame linked to increased post-rape trauma and depression
Frazier & Schauben, 1994	rape victims	59	Sexual Experiences scale; Brief Symptom inventory; McPearl Belief scale; questions regarding attributions and beliefs of control concerning rape	both behavioural and characterological self-blame related to increased psychological symptoms; both behavioural and characterological self-blame and perceptions of past control not related to beliefs of future control over rape
Ullman, 1996	rape victims	155	Mail survey regarding pre- and post-assault characteristics, self-blame, coping, social reactions, recovery	behavioural and characterological self-blame not related to recovery; when time of disclosure controlled, high levels of blame was related to poorer self rated recovery

(table continued)

Table 1a - Crime Studies

Study	Subjects	N	Measures	Outcome
McMillen & Zuravin, 1997	adult survivors of child sexual abuse	154	Interviewed and completed Attributions of Responsibility and Blame Scales, Rosenberg Self-Esteem Scale and Relationship Scale	Self-blame related to poorer adjustment; high self-blame related to decrease in self-esteem and comfortableness with closeness and increase in relationship anxiety; perpetrator blame not related to adjustment; family blame related to relationship anxiety and having a maltreated child
Feinauer & Stuart, 1996	adult survivors of child sexual abuse	276	Mailed questionnaire including Trauma Symptom Checklist-33 to assess trauma and four items from Williams McPearl Coping Scale to assess attributions of blame	Blame related to higher TSC-33 scores; self-blame related to higher TSC-33 score; perpetrator blame related to lower TSC-33 scores
Hazzard, Celano, Gould, Lawry & Webb, 1995	child sexual abuse victims primary caretakers	56 56	Interviewed and completed questionnaires; Kaslow's Attributional Style Questionnaire for Children and Children's Impact of Traumatic Events Scale Revised; Parental Reaction to Incest Disclosure Scale; Parental Attribution Style; Child Behavior Checklist Parent Report Form; clinical evaluation with Children's Global Assessment Scale	Lower levels of self-blame related to better adjustment; more self-blame found in younger children, children with depressed attributional style and in children whose mothers blamed them

(table continued)

Table 1b - Illness Studies

Study	Subjects	N	Measures	Outcome
Tennen, Affleck, & Gershman, 1986	mothers of infants with perinatal complications	50	interview to assess attributions	behavioural self-blame related to perceptions of severity and future prevention which led to better emotional adjustment; other-blame linked to increased mood disturbance
Timko & Janoff-Bulman, 1985	women who had mastectomy for breast cancer	42	interview regarding experience and attributions; Beck Depression Inventory; emotions scale	behavioural self-blame related to better adjustment; characterological self-blame and other-blame related to poorer adjustment and belief that mastectomy was unsuccessful
Derry & McLachlan 1995	patients with epilepsy	40	inpatient interview and interview 2 yrs. regarding causal attributions, severity and controllability of seizures, Self-Control Schedule, Washington Psychosocial Seizure Inventory	more attributions made to personal behaviour and stress responses than to other people, bad luck or heredity, self attributions related to better psychological and social adjustment; external attributions related to poor psychosocial adjustment
Taylor, Lichtman, Wood, 1984	women with breast cancer	78	interview and questions regarding attributions	no specific attribution linked with better psychological functioning; other-blame significantly associated with inferior adjustment
Peterson, Schwartz, Seligman, 1981	college women	87	Expanded Attributional Style Questionnaire; Beck Depression Inventory; Life Events Questionnaire	characterological self-blame positively correlated with depressive symptoms; behavioural self-blame and external blame was negatively correlated with depressive symptoms

(table continued)

Table 1b - Illness Studies

Study	Subjects	N	Measures	Outcome
Kiecolt-Glaser & Williams, 1987	acute burn patients	49	interviews and self reports	self-blame related to decreased compliance with nurses, increased pain behaviour and depression
Downey, Silver & Wortman, 1990	parents who lost a baby to SIDS	124	interview, questions regarding attributions of blame; SCL-90-R	self-blame and other-blame associated with increased psychological distress; attributions to chance not related to distress
Madden, 1988	women who suffered a miscarriage	65	interview regarding experience and attributions; Zung Self-Rating Depression scale	behavioural self-blame related to high levels of depression; characterological self-blame not related to depression; other-blame related to depression
James & Kristiansen, 1995	women who suffered a miscarriage	72	questionnaire regarding experience and attributions; Coping Strategies Inventory; Multidimensional Scale of Perceived Social Support; Centre for Epidemiological Studies of Depression scale; Perceived Stress scale; State-Trait Anxiety Inventory; Miscarriage Reaction Inventory	behavioural self-blame not related to emotional adjustment; characterological self-blame associated with intense psychological distress; other-blame related to intense psychological distress
Metalsky, Joiner, Jr., Wonderlich, Beatty, Staton, & Blalock, 1997	diagnosed bulimics	22	Extended Attributional Style Questionnaire and Beck Depression Inventory	attributional style predicted depressive symptoms; internal, stable, global attributions (negative) related to severe depression; external, unstable, specific attributions (positive) related to non-depression

(table continued)

Table 1b - Illness Studies

Study	Subjects	N	Measures	Outcome
Malcarne, Compas Epping-Jordan and Howell, 1995	cancer patients	72	Interviewed and completed questionnaires at or near diagnosis and four months later; interview questions to assess behavioural and characterological self-blame; modified version of Global Severity Index	Time 1 behavioural and characterological self-blame not related to distress Time 1 or Time 2; Time 1 behavioural and characterological self-blame predicted distress at Time 2, Time 1 distress predicted Time 2 characterological self-blame
Moulton, Sweet, Temoshok and Mandel, 1987	AIDS patients ARC patients	50 53	Interviewed regarding attributions, life changes, behavioural changes; completed POMS monopolar; abbreviated version of Taylor Manifest Anxiety Scale; Beck Hopelessness Scale	High self-blame for cause of illness related high levels of dysphoria in AIDS patients, but not in ARC patients; the amount of cause related to self was greater in AIDS and ARC patients who blamed themselves than those who did not blame themselves

Table 1c - Accident Studies

Study	Subjects	N	Measure	Outcome
Bulman & Wortman, 1977	paralysis victims	29	interviews and questions assessing blame; Rotter's Locus of Control scale; Just World scale; religious attitude scale; adjustment assessed by nurses and social workers	self-blame and belief that accident was avoidable associated with better coping; other-blame and belief that accident was unavoidable related to poor adjustment

(table continued)

Table 1c - Accident Studies

Study	Subjects	N	Measure	Outcome
Warren, Wrigley, Yoels & Fine, 1996	spinal cord injury traumatic brain injury	38 137	Phone interview and completed Life Satisfaction Index-A; Functional Independence Measures; Family Satisfaction Scale; question assessing self-blame	Self-blame predicted life satisfaction; accepting blame for injury related to increased life satisfaction
Joseph, Brewin, Yule & Williams, 1991	survivors of the Herald of Free Enterprise	20	interviews assessing attributions, GHQ-30; Impact of Event Scale; Beck's Depression Inventory; State-Trait Anxiety Inventory	internal, controllable attributions associated with high levels of distress and depression
Joseph, Brewin, Yule & Williams, 1993	adolescent survivors of Jupiter Cruise ship disaster	16	interviews assessing causal attributions, Birleson Depression Inventory, Revised Children's Manifest Anxiety Scale, Impact of Event Scale at Time I and Time II	at Time I, internal attributions related to higher levels of BDI, intrusion sub-scale and total IES; at Time II, internal causal attributions related to higher levels on BDI, intrusion sub-scale and total IES and lower social desirability; internal causal attributions associated with greater symptomatology
Solomon & Thompson 1995	victims of Summerland Fire; Herald of Free Enterprise disaster; Hillsborough Fire/Crush	145 survivors; 10 named responsible	questionnaires sent IES (shortened version), GHQ (shortened version), IES (added questions), questions regarding blame, anger, sense of justice and the handling of disaster	self- and other-blame both related to high levels of distress on IES and GHQ; self-blame predictive of high GHQ and IES scores and poor adjustment; other-blame not predictive of high GHQ and IES scores or outcome

on victim perceptions of vulnerability. Results from interviews, the Beck Depression Inventory and an emotion scale indicated that behavioural self-blame was related to better adjustment and beliefs about past and future control over cancer. Women who felt that they could avoid a recurrence of the cancer reported more happiness and feelings of optimism. Characterological self-blame and other blame were both related to poor adjustment and the

belief that the mastectomy was unsuccessful. Timko and Janoff-Bulman explain this later finding by suggesting that these women believed cancer could not be completely removed and was permanent. They proposed that this belief, just like characterological self-blame, emphasised the stable, global and immutable aspects of cancer.

Derry & McLachlan (1995) investigated the relationship between attributions for the cause of seizures and preoperative adjustment and postoperative function in patients with temporal lobe epilepsy (seizure and seizure-free patients). Patients were assessed on the cause of the seizures (personal behaviour, stress responses, other people, bad luck and heredity), severity of their epilepsy, controllability over the happening or preventing of seizures, learned resourcefulness (Self-Control Schedule - SCS) and psychosocial adjustment (Washington Psychosocial Seizure Inventory - WPSI). Subjects completed an attribution questionnaire, the WPSI and the SCS at the preoperative inpatient assessment and were then interviewed two years later after investigation/surgery to assess outcome. Results showed that more attributions were made to personal behaviour and stress responses than to other people, bad luck, and heredity. Patients who had causal attributions related to factors about the self had better psychological and social adjustment.Conversely, patients who had causal attributions related to external factors had poor psychosocial adjustment. Derry & McLachlan argued that these results could be due to the increase in self-control over the occurrence of seizures that accompanied self-blame attributions. Further, they state that other blame attributions may limit the amount of social support available to these patients, which has been found to be adaptive for adjustment in traumatic events related to health.

Self-Blame Detrimental

Taylor, Lichtman and Wood (1984) addressed the issues of attribution and control in a study with women with breast cancer. They predicted that if the patient felt some control in terms of their cancer, positive adjustment would result. In addition, the researchers wanted to know how the content of attributions were related to adjustment. The results of this study indicated that no specific attribution was associated with better psychological functioning. There was also no link between adjustment and attributions of self responsibility, the environment or chance. A strong link was found between ideas of control and adjustment. Moreover, other blame was significantly associated with inferior adjustment.

Likewise, Peterson, Schwartz and Seligman (1981) suggested that characterological attributions for negative events were likely to cause an increase in guilt as opposed to behavioural attributions. In their research, they assumed depression would be associated with attributions of characterological self-blame but not with behavioural self-blame or external attributions for negative events. Congruent with this argument, Mastrovito (1974) suggested that external attributions protected self-esteem. Bard and Dyk (1956) asserted that external attribution protected from guilt, being too critical of ourselves and a belief that we lack any power. Peterson et al. (1981) found in their study with college freshmen that depressive symptoms were positively correlated with characterological attributions of blame. The opposite pattern of results were established with behavioural attributions and external attributions.

In a study conducted with severely burned patients, Kiecolt-Glaser and Williams (1987) argued that self-blaming burn patients would not comply with treatment, would exhibit enhanced anxious and depressive symptoms, and increased perceived and reported pain. The results were based on interviews and self-reports completed by acutely burned patients. Empirical findings provided evidence that increased self-blame was related to decreased compliance with nurses, increased pain behaviour and higher depression.

Downey, Silver and Wortman (1990) investigated the relationship between attributions and adjustment in parents who had lost a baby to SIDS (sudden infant death syndrome). Subjects were interviewed (topics covered psychological distress, attributions, attributional activity, emotional expression, and social support), answered questions regarding attributions of blame, and completed the Symptom Checklist-90-R to assess psychological distress. Empirical findings revealed that subjects who blamed themselves, as well as someone else, exhibited more psychological distress than parents who did not. However, attributions to chance were not related to distress.

Madden (1988) explored the role of internal and external attributions in relation to adjustment in women who had suffered a miscarriage. Results from interviews regarding the pregnancy and miscarriage experiences and attributions and a self-report depression scale showed that behavioural self-blame was related to high levels of depression. Madden asserts that this result occurred because the subjects did not feel that any behavioural changes could prevent a recurrence of miscarriage in the future, which in turn, reduced the adaptive potential of perceived controllability inherent in the concept of behavioural self-blame.

Characterological self-blame was not related to depression. However, other blame was associated with depression and poorer coping.

James and Kristiansen (1995) went on further to investigate responsibility and blame attributions in the event of a miscarriage. Results were based on mailed questionnaires regarding the experience and attributions and scores from the Coping Strategies Inventory, the Multidimensional Scale of Perceived Social Support, the Centre for Epidemiological Studies Depression Scale, the Perceived Stress Scale, the State-Trait Anxiety Inventory and the Miscarriage Reaction Inventory. James and Kristiansen found in their study that behavioural self-blame was not related to emotional adjustment, which was inconsistent with Madden's (1988) findings. Moreover, results indicated that both characterological self-blame and other-blame were associated with intense psychological distress.

Metalsky, Joiner, Jr., Wonderlich, Beatty, Staton, & Blalock (1997) investigated the role of attributional style in bulimics in an attempt to determine whether attributional style would predict depression in such a subject sample. In the study, twenty-two participants who met the diagnostic criteria for bulimia were assessed using the Beck Depression Inventory (BDI) and the Extended Attributional Style Questionnaire (EASQ). Results indicated that attributional style was predictive of depressive symptoms. Bulimic participants who made internal, stable, and global attributions (negative attributional style) were severely depressed, while bulimic participants who made external, unstable, specific attributions (positive attributional style) were non-depressed. Metalsky et al. explained that these results could have occurred due to the helplessness/hopelessness theory in that symptoms of bulimia may act as negative events which lead to feelings of hopelessness, in turn, resulting in depression.

Malcarne, Compas, Epping-Jordan and Howell (1995) examined attributions of self-blame and adjustment to cancer in seventy-two cancer patients. Subjects were interviewed regarding self-blame and completed the modified version of the Global Severity Index (GSI) to assess psychological distress at or near diagnosis and four months later. Results indicated that initial levels of behavioural and characterological self-blame were not related to concurrent distress or distress four months later. Behavioural and characterological self-blame at or near diagnosis, however, predicted psychological distress at four months post-interview. In addition, distress at or near diagnosis predicted characterological self-blame four months later, but not behavioural self-blame. Results suggest a reciprocal relationship between characterological self-blame and distress.

Moulton, Sweet, Temshok and Mandel (1987) investigated attributions of blame in relation to distress in patients with AIDS and AIDS-related complex. Fifty AIDS and fifty-three ARC patients were interviewed regarding attributions, life changes and health behaviour changes and completed the POMS monopolar version, the abbreviated version of the Taylor Manifest Anxiety Scale and Beck Hopelessness Scale to assess dysphoria. A general dysphoria measure was created through principal component analysis. Results indicated that self-blame for the cause of the illness was correlated with dysphoria in patients with AIDS, but not in patients with ARC. AIDS patients with high levels of self-blame had high levels of dysphoria, whereas this relationships did not emerge in ARC patients. Further the amount of self-blame for the cause of the illness was higher among self-blame subjects than non self-blame subjects in the AIDS and ARC patient groups.

Empirical studies on victims of illness and health-related problems offered conflicting findings in terms of the potential benefit of self-blame attributions in relation to the adjustment process (see Table 1b). When victims felt that they could control the recurrence of the illness or health-related problem by changing their behaviour, self-blame based on behaviour appeared to be related to a more positive adjustment. However, when victims felt that they could not control the recurrence of the illness or health-related problem by changing their behaviour, behavioural self-blame was related to increased distress and a less adaptive outcome.

Accidents/Disasters

Self-Blame Beneficial

Bulman & Wortman (1977) examined the relationship between attributions of blame and adaptation in individuals paralysed in severe accidents. In-depth interviews were conducted with accident victims and levels of adjustment were assessed by social workers and nurses in the rehabilitation centre. Results indicated that accident victims who blamed themselves and believed the accident was avoidable were more apt to cope better with their condition. Conversely, individuals who blamed another person and who believed the accident was unavoidable exhibited enhanced problems in coping.

Warren, Wrigley, Yoels and Fine (1996) examined self-blame and life satisfaction in one-hundred-seventy-five patients of spinal cord injury (n = 38) and traumatic brain injury (n = 137) in a phone interview twelve months post-discharge. Subjects completed the Life Satisfaction Index-A (LSI-A), the Functional Independence Measure for memory and bowel independence, the Family Satisfaction Scale, and answered a question about whether they blamed themselves for their injury. Results indicated that spinal cord injury patients and traumatic brain injury patients who accepted blame for their injury had increased levels of life satisfaction, as self-blame predicted life satisfaction.

Self-Blame Detrimental

Joseph, Brewin, Yule & Williams (1991) investigated the link between attributions and psychiatric symptoms in the Herald of Free Enterprise disaster survivors. They hypothesised that attributions for the disaster which were internal (e.g., self-blame) and controllable would lead to an increased degree of post-traumatic stress and depression. Results from survivors who were interviewed and completed several self-report measures (e.g., General Health Questionnaire-30, Impact of Event Scale, Beck Depression Inventory, & State-Trait Anxiety Inventory) confirmed the hypothesis. Although mostly external and uncontrollable attributions were made, those subjects who reported internal and controllable attributions for the cause of the disaster exhibited higher levels of distress and depression. The internal attributions were correlated with higher scores on the GHQ-30, the Beck Depression Inventory and the Impact of Event Scale. Attributions which were high in controllability were correlated with higher scores on the Beck Depression Inventory.

Joseph, Brewin, Yule, and Williams (1993) investigated causal attributions and post-traumatic stress in adolescent survivors of the Jupiter disaster. Sixteen adolescents were assessed on their causal attributions for the disaster, Birleson Depression Inventory, the Revised Children's Manifest Anxiety Scale, and the Impact of Event Scale at Time I (around five months after disaster) and Time II (around one year after). Results showed that internal attributions for the cause of the disaster were related to greater symptomatology on the Birleson Depression Inventory, the total score for the Impact of Event Scale and the intrusive sub-scale on the Impact of Event Scale at Time I. At Time II, internal attributions were related to greater symptomatology on the Birleson Depression Inventory, the intrusive sub-

scale and total score on the Impact of Event Scale, and the social desirability scale of the Children's Manifest Anxiety Scale. These results indicated that causal attributions relating to the self were associated with greater dysfunctional symptomatology.

Solomon and Thompson (1995) examined anger and blame in three disasters: the Summerland entertainment centre fire (1973), the Herald of Free Enterprise ferry capsizing (1987), and the Hillsborough crush (1989). One-hundred and forty-five survivors participated (Summerland-24, Herald-63, & Hillsborough-58) and ten of those named "responsible" participated. Subjects were sent questionnaires that assessed the impact of the disaster (shortened version of the Impact of Event Scale - 6 items), psychological distress (shortened version of the General Health Questionnaire - 8 items), emotional reactions (additional section of the Impact of Event Scale). In addition, subjects were asked questions (both on 5 point Likert scaling and open-ended) regarding blame, anger, sense of justice, and the handling of the disasters. Results showed that both self-blame and other-blame were related to high levels of symptomatology on the General Health Questionnaire and the Impact of Event Scale. Further, multiple regression analyses revealed that self-blame was predictive of high General Health Questionnaire and Impact of Event Scale scores, while other-blame was not. These results showed that self-blame attributions were predictive of poor adjustment outcome. Solomon and Thompson concluded that since other-blame attributions were not predictive of adjustment outcome (either positive or negative), these attributions were not indicative of fear of repeat victimisation.

Results (see Table 1c) from the Bulman and Wortman study(1977) indicated that self-blame was beneficial to the adjustment process and that other-blame was related to poorer adjustment. In addition, Warren et al. (1996) found that self-blame and accepting blame predicted increased life satisfaction. Contrary to this finding, Joseph et al. (1991,1993) and Solomon and Thompson (1995) found that self-blame was related to increased distress and depression.

SUMMARY - COMPARISON OF SELF-BLAME ATTRIBUTIONS IN CRIME, ILLNESS & ACCIDENTS/DISASTERS

Research on the relationship between attributions of self-blame and other-blame in victims of crime, illness and accidents/disasters has provided conflicting empirical findings. Some studies showed self-blame attributions to be positive in relation to adjustment (e.g., Janoff-Bulman, 1979; Bulman & Wortman, 1977; Winkel, Denkers & Vrji, 1994; Tennen, Affleck & Gershman, 1986; Derry & McLachlan, 1985), while others have shown that self-blame attributions are detrimental to adjustment (e.g., Frazier, 1990; Frazier & Schauben, 1994; Taylor, Lichtman & Wood, 1984; Joseph, Brewin, Yule & Williams, 1991,1993; Metalsky et al., 1997).

Tennen & Affleck (1990), in their meta-analysis of twenty-five attribution studies concerning the issues of self-blame and other-blame for threatening events (including studies on illness, accidents and crime), found that in twenty-two of the studies that other-blame was associated with poor adaptation and adjustment. They suggested that these consistent findings occurred due to several reasons. First, other-blame reduced the number of effective coping strategies available. Second, other-blame shattered one's world views one holds dear. Third, other-blame may reduce the availability of support because the person blamed may possibly be in a position to provide support. Tennen & Affleck said of their model, "...that unlike behavioural self-blame, which offers the victim both a sense of control over future threats and the image of a reliable world, other-blame shatters either the illusion of self-sufficiency among those who entertain that illusion or one's belief in a benign world and the reliability of others" (pg. 226).

It appeared that self-blame may be a positive strategy for some crime, illness and accident/disaster victims, yet a negative one for many others. The issues of vulnerability, control and avoidance of future events may be important for positive self-blame, however, these issues may not be as important for all types of crime, illness and accidents/disasters. The crime studies in which self-blame was related to a positive outcome were ones which did not use the actual victims (Janoff-Bulman, 1979; 1982) or used crime victims of less violent and non-personal crimes (e.g., burglary; Winkel, Denkers & Vrji, 1994). When actual crime victims were used and the crimes were violent, self-blame was not related to a more positive outcome but to increased level of psychological distress (e.g., Frazier, 1990; Frazier & Schauben, 1994). The accident study which showed that self-blame was a positive strategy

(Bulman & Wortman, 1977) collected the adjustment assessment from the rehabilitation staff instead of the actual accident victims. The possibility exists that the accident victims may have assessed their adjustment level differently than did the staff.

Due to these conflicting empirical results, future research is warranted in order to determine what additional variables may be involved in the relationship between attributions and adjustment outcome.

CHAPTER 3

THE IMPACT OF CRIMINAL VICTIMISATION: PRIMARY & SECONDARY VICTIMS

INTRODUCTION

Newspapers and television report daily that the prevalence of crime has been on the increase. An important issue which warrants attention concerns the likelihood of one becoming a victim of crime. In the latest Scottish Crime Survey (Anderson & Leitch, 1993) it was reported that in excess of one million crimes were committed against people and homes in Scotland in 1992. Of those who responded to the survey, 1 out of 4 individuals had been victimised and 1 in 20 had been a victim of crime 3 or more times.

Research conducted with victims of crime is still a relatively new field, covering the last twenty years. During this time period, it has been well established that victims of crime suffer from psychological, behavioural and health-related effects resulting from the victimisation experience, which include shock, fear, loss of self-esteem, depression, post-traumatic stress disorder, sleep disturbances, changes in eating patterns, headaches and heart palpitations (e.g., Frieze, Hymer & Greenberg, 1987; Norris & Kaniasty, 1994; Sorenson & Golding, 1990; Kilpatrick, Saunders, Amick-McMullan, Best, Veronen & Resnick, 1989; Letourneau, Resnick, Kilpatrick, Saunders & Best, 1996; Freedy, Resnick, Kilpatrick, Dansky & Tidwell, 1994; Lurigio, 1987; Leymann, 1985). In addition, victims of crime have become increasingly recognised by society as suffering from problems related to the victimisation and needing assistance. The victims movement which surfaced in the U. S., Great Britain and Europe during the mid-80's provided the impetus for this recognition. As a result of this movement, support agencies were formed, money became available to fund support agencies and to provide compensation for victims of crime, and victim's bill of rights (U. S.) and victim charters (Great Britain) were established. Considering the prevalence of crime in society today, it is important to conduct research in order to understand the full ramifications of criminal victimisation so that appropriate support programs can be designed and put in place to help alleviate the suffering victims of crime.

However, other people may feel victimised by crime although they were not directly involved. Family members, significant others, and close friends may feel a sense of being victimised themselves. This is especially true for persons, who as ***secondary victims***, are left behind to deal with the trauma and loss associated with having a family member murdered. When a murder is committed, the number of people affected is incredibly wide reaching; entire families, neighbourhoods, and communities are potentially affected. Secondary victims of murder have been the topic of only a limited amount of research that has been conducted in the last 10 years. It has been established that secondary victims of murder experience psychological effects such as post-traumatic stress disorder, as well as a wide range of behavioural and health-related effects (Amick-McMullan, Kilpatrick & Resnick, 1991; Masters, Friedman & Getzel; 1988; Burgess, 1975), yet little is known about what mitigating variables (e.g., attributions of cause, responsibility and blame) may exacerbate or reduce their suffering and complicate their adjustment. Therefore, more research is warranted in order to gain a better understanding of the adjustment process of secondary victims of murder so that appropriate support and counselling services can be made available.

The following literature review is organised into two sections. First, the crime victim literature is reviewed in order to gain an insight into the victimisation experience and the effects which are encountered by victims of crime. Next, the research on secondary victims of murder is discussed. Both the crime victim and secondary victims of murder research sections are divided into subsections (reactions, emotional effects, behavioural effects, and health-related effects in addition, the secondary victims of murder research section also contains attributions, bereavement and the role of secondary victimisation in grieving subsections.

Crime Victim Research

Being a victim of crime is an experience which affects people in a myriad of different ways. Not only do victims of crime experience economic loss and/or physical injury, but they also experience immediate reactions to the crime and psychological, behavioural and health-related effects.

Reactions

Many common responses are encountered when criminal victimisation occurs. Janoff-Bulman & Frieze (1983) suggest that there are three basic assumptions which are shattered when people are victimised which explain why crime victims react and respond the way they do. The first assumption is one's invulnerability. People do not see themselves as vulnerable. This allows for self-protection against anxiety and stress. When one is victimised, this illusion is crushed and the feelings of being safe and secure are destroyed. The second assumption is that the world is meaningful, orderly and controllable. The way the world works and operates makes sense to us. This assumption parallels the Just World hypothesis (Lerner & Miller, 1978) in which one believes that people get what they deserve. When victimisation occurs, this illusion is shattered. The world does not make sense anymore especially if one believes that one was a good person. The victimisation takes away the belief that the world is controllable and orderly and leaves behind a sense of loss of control and order over one's life. The third assumption involves self-perceptions of worth and self-esteem. Normally, people view themselves as worthy and have a positive self-image. When one is victimised, this illusion is replaced with one of low self-esteem and worth. Victims feel weak, powerless and out of control. The shattering of these three assumptions can lead to negative outcomes.

Lurigio (1987) examined the issues of vulnerability, fear and self-efficacy in 227 victims of burglary, robbery and non-sexual assault and 104 non-victims. The results from interviews with victim and non-victim samples showed significant differences between victims and non-victims in relation to the issues of vulnerability, fear and self-efficacy. Victims were more likely to feel vulnerable to future victimisation than non-victims. Victims reported more fear regarding being attacked, robbed in the evening or burgled, than did non-victims. Victims also believed that future victimisation was less controllable and that increased efforts to stave off future crime would provide little resistance to the actual crime occurring.

In their review of crime victim research, Frieze, Hymer & Greenberg (1987) noted many shared reactions. They conceptualised victim reactions into three categories: immediate reactions, short-term reactions, and long-term reactions. Immediate responses include feelings of shock, surprise, numbness and denial. These typically last for several hours to several days. Following this initial phase come the short-term reactions which include feelings of sadness, guilt, remorse, sense of loss, frustration, fear, anger, confusion, and feelings of vulnerability.

Bard & Sangrey (1986) call this the *recoil* phase and explain that it lasts generally for 3 - 8 months. Although many victims are able to reconstruct their lives back to the way it was before the victimisation, some victims experience long-term reactions to their victimisation which can lead to psychological effects such as severe distress, depression and post-traumatic stress disorder.

Emotional Effects

Norris & Kaniasty (1994) conducted a fifteen-month longitudinal study (assessed at three, nine and fifteen months post-crime) of distress. Subjects included 105 victims of violent crime, 227 victims of property crime and 190 non-victims. Levels of depression, somatisation (health problems or complaints), hostility, anxiety, phobic anxiety, fear of crime and avoidance were evaluated using interviews and the Brief Symptom Inventory. Results showed that violent crime victims were more distressed than the other two groups. Although they improved during the first nine months, violent crime victims had more symptoms at the fifteen-month assessment than did the property crime victims and the non-victim control group and did not continue to improve.

Sorenson & Golding (1990) investigated depression and suicidal tendency in crime victims who had been burgled, mugged, or sexually assaulted. These subjects came from a community sample of 2700 who were targeted for participation in the study. Subjects who had not been victimised were used as a matched sample for a control group. Subjects were interviewed in person and completed the Center for Epidemiological Studies Depression scale (CES-D) to assess depression. Suicidal tendencies were assessed from subject responses to questions taken from the Diagnostic Interview Schedule. Results showed that victims of any crime were more depressed than non-victims. Being a victim of mugging and/or sexual assault was highly related to increased depression. Thoughts of suicide or suicidal actions were more likely to occur in victims than non-victims. Results from this study indicated that mugging victims were three times as likely to have suicidal thoughts or actions as compared to other crime victims and the non-victim control group.

Freedy, Resnick, Kilpatrick, Dansky & Tidwell (1994) examined the presence of post-traumatic stress disorder in victims of crime (physical assault, criminal sexual conduct, robbery, burglary) and family members of crime victims (murder/vehicular homicide, criminal

sexual conduct, physical assault, robbery and burglary). The 251 subjects participated in structured telephone interviews which covered the topics: characteristics of the crime, beliefs about and involvement with the criminal justice system, and presence of symptoms of post-traumatic stress disorder. Results indicated that 25.5% of the subjects exhibited symptoms consistent with a diagnosis of post-traumatic stress disorder at the time of the interview. An additional 25.9% of the subjects had at one time prior to the interview experienced symptoms which met the criteria for a post-traumatic stress disorder diagnosis. Victims or family members who experienced violent crime were more likely to experience post-traumatic stress disorder than victims (primary or secondary) of less violent crimes.

Being a victim of crime produces emotional effects which can include severe distress, depression, suicidal ideations and post-traumatic stress disorder. In order to reduce these emotional effects, victims may change their behaviour.

Behavioural Effects

Behavioural effects of victimisation take the form of changes in the actual victim and the victim's behaviour. Frieze, Hymer & Greenberg (1987) listed behavioural changes which included changes in victim's eating and sleeping patterns, which include insomnia, flashbacks and nightmares. Lurigio (1987) found in burglary, robbery & non-sexual assault victims changes in behaviour which included: being highly aware of suspicious people; staying away from strangers while out; determining if anyone was hiding behind the door of their home when they entered. All three victim types showed disturbances in sleeping patterns and an increased use of prescription drugs as compared to a non-victim control group. Differences between the three victim types showed that assault victims had alcohol-related problems more often than did burglary or non-assault victims.

The emotional and behavioural effects that victims encounter may, in turn, lead to health-related effects.

Health-Related Effects

Leymann (1985) examined somatic symptoms in bank robbery victims. Subjects completed a questionnaire with thirty-nine stress symptoms and determined whether they

experienced the symptom and at what point in time the symptom was experienced (during, after, within three weeks, within six months, after six months, and before the robbery). Results showed that the victims did experience stress symptoms. Health-related symptoms experienced by 10% of the subjects at the five above mentioned time intervals included: headaches, shaky hands, lump in throat, weakness in legs, dry mouth, and heart palpitations. In addition, results indicated that the presence of these symptoms dramatically decreased over time. Likewise, Lurigio (1987), in his research with burglary, robbery and non-sexual assault victims, found that victims experienced a health-related effect of upset stomach.

Health problems related to victimisation is a topic which needs more research. In order to gain a better understanding of the full impact of victimisation, health problems caused by crime (whether they are actually caused by the crime or are perceived to have been caused by the crime) needs to be investigated more fully. It may be that victims who experience health problems have a more difficult time coming to terms with and adjusting to their victimisation than do those victims who do not experience health problems.

Secondary Victim Of Murder Research

Since secondary victims are left behind to cope with the trauma and loss associated with the murder of their loved one and experience similar reactions to actual crime victims, it could be argued that these secondary victims should be recognised and treated as 'victims of crime'. A major difference between primary victims of crime and secondary victims of murder, however, appears to be the level of intensity of reactions to the crime and the length of time the effects of the crime persist. Murphy (1996) suggests that problems due to violent death materialise immediately and persevere over an extended period of time. Rando (1996) contends that when people are confronted with a sudden, unanticipated death, they are forced to deal not only with the loss, but also to struggle with their own personal traumatisation.

Amick-McMullan, Kilpatrick and Resnick (1991) suggest that secondary victims of murder, "...face a debilitating array of experiences including the uncontrollable loss of a loved one, a shattered sense of security, overwhelming anxiety, repeated exposure to homicide-related stimuli, and dramatic disruptions of daily routines" (pg. 545). They further state that the impact of such an event affects secondary victims not just psychologically, but also in terms of emotion, cognition and social domains. The impact is intensely far-reaching.

Burgess (1975) hypothesised and formulated a 'homicide-trauma syndrome' from her pilot research with family members who had lost a relative to murder. This syndrome encompasses the reactions, psychological, behavioural, health-related effects, and the social and legal demands of murder on grieving family members. Simply stated, the syndrome involves the immediate reactions, then the acute bereavement phase and then finally, the long-lasting reconstruction of one's life.

The effect that murder has on secondary victims has been examined in the forms of immediate reactions; the emotional, behavioural, and health-related effects; the bereavement process; and the role of secondary victimisation in the grieving process.

Reactions

The turmoil that results from having a family member murdered is comprised of many reactions. Secondary victims experience an initial emotional response of shock and confusion. Following this initial response, many secondary victims find themselves unable to believe that their family member has been murdered. The information is incomprehensible (NOVA, 1985). Gyulay (1989) states that secondary victims feel a deep numbness when confronted with the news of the murder. They may be unable to feel anything and denial is common in the initial phase.

After the initial shock has worn off, secondary victims may experience a wide range of reactions and emotions. Masters, Friedman & Getzel (1988) were told by people who had experienced a loss as a result of murder that they often experienced feelings of grief, rage, despair and guilt. These reactions occurred at any time and in close presence to each other. Peach & Klass (1987) were told by their subjects from the support group Parents of Murdered Children that they felt intense fear and a loss of trust in others as a result of the murder. Sprang, McNeil & Wright, Jr. (1989) acknowledge that many secondary victims experience intense feelings of helplessness and loss of control. Gyulay (1989) posits that these victims also experience feelings of intense hurt/sorrow, vulnerability, paranoia (especially if the perpetrator is not caught), anger, guilt, and frustration.

Losing a family member to murder elicits a wide range of reactions which can lead to psychological effects, such as post-traumatic stress disorder.

Emotional Effects

Secondary victims experience murder-related emotional effects. Janoff-Bulman and Frieze (1983) state that the psychological effects victims experience are characteristic of the distress they endure. It has been well-established in psychological research that secondary victims experience emotional problems consistent with the diagnosis of post-traumatic stress disorder (Parkes, 1993; Amick-McMullan, Kilpatrick & Resnick, 1991; Applebaum & Burns, 1991; Riggs & Kilpatrick, 1990; Amick-McMullan, Kilpatrick & Veronen, 1989; Amick-McMullan, Kilpatrick, Veronen & Smith, 1989; Rinear, 1988; Freeman, Shaffer & Smith, 1996). Post-traumatic stress disorder (PTSD) is a diagnosis which includes recurrent thought about the trauma, avoidance of trauma cues and enhanced arousal when in contact with trauma cues. Amick-McMullan et al. (1989) found in their study of 19 secondary victims that 16 exhibited symptoms of PTSD. Amick-McMullan et al. (1991) reported findings in their research with 115 secondary victims which showed the presence of PTSD in 23.3.% of the subjects.

In their research on the development of PTSD in siblings and parents of murdered children and deaths by accidents, Applebaum and Burns (1991) reported that 45% of the siblings and 35% of the parents, who were interviewed and completed PTSD self-reports, exhibited symptoms fitting the criteria for a PTSD diagnosis.

Amick-McMullan et al. (1989) reason that symptoms of PTSD are maintained in secondary victims through classical conditioning. They contend that secondary victims associate cues which otherwise would be neutral (e.g., door bell ringing, telephone ringing) with the trauma (e.g., being notified of the death) which produce distress and thus they attempt to avoid such cues.

Behavioural Effects

In addition to the emotional effects, secondary victims may also display changes in behaviour related to the murder of their loved one. Research has shown that secondary victims experience behavioural changes which include changes in eating and sleeping patterns, nightmares, changes in relationships with family and friends (especially as a result of blaming

other family members or friends), increased startle reactions, avoidance of cues related to the murder, and over-protectiveness directed towards the self and others (Amick-McMullan, Kilpatrick & Resnick, 1991; Amick-McMullan, Kilpatrick, Veronen & Smith, 1989; Masters, Friedman & Getzel, 1988). Secondary victims may also find it impossible to enjoy previously enjoyable activities. They may find it difficult to interact with others due to the stigma associated with murder, thereby segregating themselves from others (Sprang, McNeil, & Wright, Jr., 1989).

Health-Related Effects

Burgess (1975) found in her pilot study of secondary victims of homicide that health-related effects occur. Symptoms that subjects reported included headaches, chest pains, irregular heart beat and gastrointestinal problems. Masters, Friedman & Getzel (1988) found in their study that subjects reported experiencing health-related complaints such as high blood pressure and pain in the lower back. Amick-McMullan et al. (1989) uncovered similar findings which also included changes in weight (gaining and losing weight).

Research on the topic of health-related effects is sparse, yet it appears to be an important component in understanding the full ramifications of trauma associated with losing a loved one to murder. More research should be conducted to determine if a wider range of health problems are experienced by secondary victims and if these problems also occurred before or subsequent to the murder. It would also be of benefit to determine what secondary victims believe caused their health problems. It could be that their perception of causation could also exacerbate their bereavement, which in turn may negatively affect their recovery.

Bereavement

Bereavement for secondary victims is complicated by the psychological, behavioural and health-related effects caused by the murder of their loved one. Parkes and Weiss (1983) suggested that when a loss occurs which involves sudden death, functioning is so debilitated that adjustment cannot be thought of as uncomplicated. Gyulay (1989) asserts that secondary victims of murder may feel shock, fear, helplessness, guilt, anger, confusion and paranoia. All of these findings combine to produce an intense, complicated grief. Kubler-Ross (1983), an

experienced thanatologist, argues that a major component of the complicated grief experienced by secondary victims of murder is the fact that they are denied the opportunity to say good-bye, unlike losses which are anticipated, even briefly.

Grief reactions have been examined by several research teams (Amick-McMullan, Kilpatrick & Veronen, 1989; Masters, Friedman & Getzel, 1988; Peach & Klass, 1987; and Sprang, McNeil & Wright, 1989). Amick-McMullan et al. (1989) in their analysis of secondary victims of murder discuss three problems of attempting to apply stage theories of grief to secondary victims of murder. The first problem is the lack of consensus on the actual number of stages involved. The second problem is that stage theories do not take into consideration that secondary victims may react and grieve in a variety of ways. The third and final problem identified by Amick-McMullan et al. is that stage theories do not define clearly the differences between grief that is identified as normal and grief that is not. Consequently, it may be inappropriate to try to apply grief stage theories to understand the bereavement process of secondary victims of murder.

Secondary victims of murder do exhibit grief symptoms, but their grief is more far reaching and several grief responses are unique to this type of bereavement. Sprang et al. (1989) in their article discussing research on bereavement due to murder describe the grief involved with this population as "*...more profound, more lingering, and more complex than normal grief*" (pg. 159). They go on to say that normal grief is associated with an end result of acceptance which is not necessarily the case for secondary victims. Sprang et al. (1989) suggested that secondary victims of murder may face the crime for the rest of their lives and may not ever come to a resolution. Amick-McMullan et al. (1989) further conclude from their research with secondary victims that the grief they experience differs from normal grief, "*...in the extreme levels of rage, revengefulness, anxiety and phobic reactions*" (pg. 76). In their research with participants from the support organisation Parents of Murdered Children, Peach and Klass (1987) provide evidence to support Amick-McMullan et al. (1989). Through their study which was based on participation with and observations of the support group members, they found that secondary victims have an intense level of anger and a strong drive for revenge which complicates their grief.

Weinberg (1994) investigated the role of revenge in terms of recovery with subjects who had experienced the death of a loved one through natural (e.g., illness) versus unnatural causes (e.g., accident, murder, and suicide). Subjects answered a question measuring their

desire for revenge and completed a self-report recovery measure. Weinberg (1994) found that revenge was associated with poorer recovery. She posits that this may be due to the fact that when subjects thought about revenge, they concentrated on the loss and were unable to break away from the loved one. In addition, she purports that revenge is looked upon in society as an improper feeling or response, and therefore, when people have feelings of revenge, they may think badly of themselves.

The element of violence may detrimentally affect the grieving process of secondary victims. The fact that the death occurred as a result of intentional violence and not due to an accident is tremendously difficult for victims to accept. Master, Friedman and Getzel (1988) describe murder as a loss which is not solitary, but which has four components: (1) death is definite, (2) a shattering of invulnerability and trust, (3) a loss of belief in an orderly world, and (4) the loss of self-esteem. These issues further exacerbate grief for secondary victims.

Certain stimuli may aggravate the grief process. Reminders such as the birthday of the victim or the anniversary date of the crime can bring about new grief reactions (Masters et al., 1988). In addition, homicide-related cues, as Amick-McMullan et al. (1989) suggest, can intensify the bereavement process by bringing back memories and emotions associated with the murder of their loved one.

A final element which complicates the bereavement process for secondary victims is the type of attribution made for the occurrence of the murder. In a study which examined the relationship between self- and other-blame and revenge as factors in recovery from bereavement due to natural (cancer, n=79; general disease, n=38; stroke/heart disease, n=21; chronic illness, n=13; reproductive difficulties, n=9) versus unnatural causes (accidents, n=30; murder, n=4; suicide, n=6), Weinberg (1994) found that self-blame was related to poorer recovery, yet other-blame, in and of itself, was not related to recovery. However, other-blame was related to recovery when accompanied by the desire for revenge. When subjects blamed others and experienced feelings of revenge, their recovery was less successful than those subjects who did not experience feelings of revenge. Weinberg (1994) suggests that this

decrease in recovery may be due to the fact that thoughts of revenge may cause people to self-loath which would diminish good feelings about themselves.

Overall, it appears that the bereavement experienced by secondary victims of murder is complicated, far-reaching, and long-lasting.

The Role of Secondary Victimisation in the Grieving Process

Secondary victimisation, not to be confused with secondary victim, is a term applied to the further victimisation by the criminal justice system, the media, other agencies and other people directed towards victims as a result of the initial crime. Secondary victimisation is a common occurrence for secondary victims of murder. Involvement with the criminal justice system and other agencies (e.g., media) can worsen and extend grief symptoms for secondary victims.

Gyulay (1989) concluded from interviews with secondary victims that it can be devastating to be confronted by the media. News reports regarding the crime and the lack of empathy often displayed by reporters can lead to a horrible re-experiencing of the trauma. In addition, Gyulay further explains that experiences with the criminal justice system produces intensive grief reactions due to the usually long drawn-out process. The trial may also cause increased distress for secondary victims, many of whom have never had any contact with the criminal justice system before the murder of their relative. Listening to detailed testimony regarding the actual murder, seeing pictures of the victim's body and confronting the accused perpetrator can produce increased distress.

Amick-McMullan et al. (1989) found in their study with 19 secondary victims of murder (who were non-support seekers - not actively involved in support or counselling) and post-homicide trauma that encounters with the criminal justice system often hinder the grief process by complicating grief. In their study, subjects completed a survivor questionnaire with information related to the murder and their satisfaction with their treatment from the criminal justice system. Subjects also completed two psychological measures (Symptom Checklist-90-R & Impact of Event Scale) to assess adjustment. Results indicated that satisfaction with the criminal justice system was negatively correlated (highly significant) to scores on the SCL-90-R sub-scales of anxiety, depression and symptom severity, as well as, the total IES score. In

addition, they uncovered a significantly marked association between coping and secondary victims' level of satisfaction with their treatment from the criminal justice system.

Secondary victims may also feel victimised by family members and other people close to them. Rinear (1988) surveyed 237 secondary victims from the support group Parents of Murdered Children and found that parents often reported feeling isolated from others. When people find it difficult to know how to react or what to say to the bereaved family, they tended to stay away or avoid the situation. This isolation is perceived as an abandonment.

Unhelpful comments made by family and friends further exacerbates the grief of secondary victims. Range, Walston and Pollard (1992) investigated common responses made to the bereaved. In their study, one-hundred-forty-one undergraduate students (40% had been bereaved during the last two years) rated the helpfulness of thirty common responses in six different death scenarios (death identified as: suicide, homicide, accident, natural anticipated death, natural unanticipated death, and cause of death not identified). Ratings were based on a scale of 1= most helpful to 5= least helpful. Results for the homicide death scenario showed that six comments were perceived as especially unhelpful. Included were the responses: (1) 'Didn't the funeral home do a good job!' (m=4.77), (2) 'Heaven's a nicer place now.' (m=4.59), (3) 'It's okay to be angry at God' (m=4.00), (4) 'It was so sudden' (m=4.00), (5) 'You must get on with your life.' (m= 3.77) and (6) 'I know it hurts now but give it time.' (m=3.55). Comments such as these were reported to cause further stress for people bereaved due to murder.

Secondary victims may be blamed by family and friends for the murder of their family member. People may assume that the secondary victim could have somehow 'caused' the murder to happen or could have done something which could have prevented the murder from occurring. (NOVA, 1985). This blame causes added frustration, hurt, and pain for secondary victims and may exacerbate feelings of isolation and further complicate their grief.

METHODOLOGICAL ISSUES

Several important methodological issues in relation to the research conducted with secondary victims of murder need to be addressed. The first issue is the size of the samples used in the above mentioned research. Many of the studies have not provided a sample size or the samples are small e.g., n=16 and n=19 (Burgess, 1975; Gyulay, 1989; Peach & Klass,

1987; Amick-McMullan, Kilpatrick, Veronen & Smith, 1989; Weinberg, 1994). In order for the results and findings to be generalised across the secondary victim population as a whole, it is necessary to have larger sample sizes. The second issue is that many studies do not provide any empirical evidence and make assertions based on observations and/or experience or they simply review the existing literature (Peach & Klass, 1987; Sprang, McNeil & Wright, 1989; Amick-McMullan, Kilpatrick & Veronen, 1989; NOVA, 1985). Although these assertions are valuable it remains necessary for empirical research to be conducted. The third issue concerns the lack of control or comparison samples. Of the research reviewed above, only three studies included a comparison group (Amick-McMullan, Kilpatrick & Resnick, 1991; Applebaum & Burns, 1991; Weinberg, 1994). The use of comparison samples is necessary in order to determine if qualitative differences exist in subjects in terms of the impact of murder versus other unpleasant events. Similarly, it is necessary to determine if qualitative differences exist between support seeking subjects and non-support seeking subjects who have experienced the death of a family member. Four of the above mentioned studies used subjects from support agencies (Masters, Friedman & Getzel, 1988; Peach & Klass, 1987, Applebaum & Burns, 1991; Rinear, 1988), while only one study solicited subjects who were not seeking support (Amick-McMullan, Kilpatrick, Veronen & Smith, 1989).

In order to conduct research which is methodologically sound as well as valuable, these issues need to be considered when designing future studies.

CHAPTER 4

STUDY INVESTIGATING EMOTIONAL STATE AND EVENT-RELATED IMPACT, ATTRIBUTIONS OF BLAME, CONTROL COGNITIONS, JUST WORLD BELIEFS AND FEELINGS OF REVENGE IN SECONDARY VICTIMS OF MURDER

INTRODUCTION

The aim of this four-part chapter was to investigate, both quantitatively and qualitatively, the emotional state and event-related impact, attributions of blame, control cognitions, just world beliefs and feelings of revenge in the adjustment process of family members of murder victims.

Research examining attributions of blame in relation to traumatic events has indicated that self-blame and other-blame attributions were related sometimes to positive and at other times negative trauma adjustment outcomes (see Chapter 2 for literature review). Empirical findings from these studies have shown that in people suffering from illness or health-related problems and accidents, self-blame attributions were related to positive adjustment, while other-blame attributions were related to negative adjustment (e.g., Bulman & Wortman, 1977; Tennen, Affleck & Gershman, 1986; Derry & McLachlan, 1985). On the other hand, some studies of illness and accidents/disasters have found other-blame attributions were related to positive adjustment, while self-blame attributions were related to negative adjustment (e.g., Taylor, Lichtman & Wood, 1984; Joseph, Brewin, Yule & Williams, 1991, 1993). Studies which investigated attributions of self-blame and other-blame in crime victims again found discrepant results. In studies which used non-victim samples and victims from property crimes (e.g., Janoff-Bulman, 1979, 1982; Winkel, Denkers & Vrji, 1994), self-blame was related to a positive adjustment, while studies of actual crime victims and victims of personal crimes (e.g., Meyer & Taylor, 1986; Frazier, 1990; Frazier & Schauben, 1994) found self-blame attributions were related to negative adjustment.

Due to the lack of such attribution studies with secondary victims of murder, it is not known whether self-blame or other-blame would be related to positive adjustment.

Previous research conducted with secondary victims of murder (see Chapter 3) has shown that these people suffered from negative emotional state and event-related impact from the crime (e.g., Amick-McMullan et al, 1989; Rynearson & McCreery, 1993). No research, however, has empirically examined attributions of blame, control cognitions, just world beliefs or feelings of revenge. In addition, several important methodological issues in relation to the research conducted with secondary victims of murder have arisen. The first issue is the size of the sample used in the research. Many of the studies have not provided a sample size or the samples are small e.g., n = 16 and n = 19 (Burgess, 1975; Gyulay, 1989; Peach & Klass, 1987; Amick-McMullan et al, 1989; Weinberg, 1994). In order for the results and findings to be generalised across the secondary victim population as a whole, it is necessary to have larger sample sizes. The second issue is that many studies did not provide any empirical evidence and made assertions based on observations and/or experience or they simply reviewed the existing literature (Peach & Klass, 1987; Sprang, McNeil & Wright, Jr., 1989; Amick-McMullan et al., 1989; NOVA, 1985). Although these assertions were valuable it remained necessary for empirical research to be conducted, using standardised measures. A third issue concerned the use of support-only subjects. Four of the studies used subjects from support agencies (Masters et al., 1988, Peach & Klass, 1987; Applebaum & Burns, 1991; Rinear, 1988), while only one study solicited subject who were not seeking support (Amick-McMullan et al., 1989).

In order to circumvent some of these methodological limitations, the current study used a sample of thirty-four subjects, used standardised measures and involved subjects both in support and not involved in support. In addition, it aimed to gather information concerning attributions of blame, control cognitions, just world beliefs and feelings of revenge in order to gain a better understanding of the adjustment process of secondary victims of murder.

The chapter has been divided into an introduction describing the methods used and four results sections (4.1 - 4.4), each examining specific aspects of this victimisation in the subject sample of thirty-four secondary victims of murder. The first results section (4.1) examines general levels of emotional state and event-related impact in relation to the entire subject sample, age of the subject, gender of subject, time since bereavement and support vs. non-support seekers. Comparisons are made with "norms", other subject samples, and findings of previous secondary victim of murder research in order to show the extent of the impact which the current subject sample has experienced.

The second results section (4.2) investigates attributional searching. It examines the range and type of blame attributions secondary victims of murder made and the number of blame attributions made.

The third results section (4.3) examines additional, relevant variables such as control cognitions, just world beliefs and feelings of revenge in relation to emotional state and impact of the event. In addition, concurrent predictive relationships between attributions, subject and crime characteristics, feelings of revenge and emotional state and impact of event are investigated.

Following the three empirical results sections, there is a general discussion which covers the findings of the three results sections as well as relating the results to relevant literature, and indicating methodological limitations and strengths of the study.

The fourth results section (4.4) provides a qualitative elaboration of the empirical findings of the previous three results sections. The qualitative examples concentrate on the topics of attributions of blame, feelings of revenge, impact of the murder, and emotional state. Further, these qualitative examples illustrate how these topics are related in order to depict the trauma of bereavement through murder.

Research questions addressed in the three results sections were:

Section 1:

1. Do family members bereaved through murder exhibit negative emotional state and impact of event?

2. Do family members bereaved through murder exhibit a decreased positive affect and increased negative affect?

3. Are emotional state and impact of event related to age, gender, support seeking and time since bereavement?

Section 2:

1. How many different attributions of blame do secondary victims of murder make?

2. Are increased numbers of blame attributions related to emotional state and event-related impact?

3. Is the number of blame attributions made related to age, gender, support or time since bereavement?

4. Is the level of blame attributions related to age, gender, support or time since bereavement?

5. Are certain attributions of blame related to others?

6. Are certain attributions of blame related to emotional state and event-related impact?

Section 3:

1. Are control cognitions, just world beliefs and feelings of revenge related to one another?

2. Are control cognitions, just world beliefs and feelings of revenge related to subject demographic characteristics?

3. Are control cognitions, just world beliefs and feelings of revenge related to attributions of blame?

4. Are control cognitions, just world beliefs and feelings of revenge related to emotional state and impact of event?

5. Are control cognitions, just world beliefs, feelings of revenge, subject demographic characteristics and attributions of blame predictive of emotional state and impact of event?

METHODOLOGY

Design

A retrospective study was designed which consisted of interviews with secondary victims of murder. The interview was concerned with the impact of murder on the bereaved family members. In addition, subjects completed four standardised measures used to assess emotional state and the impact of the event.

Materials

Personal Information Sheet

The personal information sheet (see Appendix A) was designed to gather demographic information on the subjects (e g., age of subject, gender, year of bereavement). In addition, it

contained questions regarding the crime (e.g., family member murdered, date and location of the crime and court outcome).

Interview

The interview schedule (see Appendix A) was designed to gather data to assess the impact of bereavement through murder. Five specific topics areas were used: (1) circumstances surrounding the crime and notification process [questions 1-8], (2) reactions to the crime [questions 29-36], (3) attributional searching and attributions of blame[questions 9-28], (4) effects of the crime on the subject's life (including questions addressing psychological, behavioural and health-related effects and changes) [questions 37-65], and (5) general questions regarding previous and current experiences with crime, unpleasant events and death of significant others [questions 66-74].

Interview Assessment Questions

Several questions from the interview schedule (see Appendix A) were used as assessment measures. These questions included topic areas of attributions of blame, control cognitions and feelings of revenge. In order to assess attributions of blame, interview question 20 was used. This question asked, "At the time of the murder, who did you blame?". Subjects rated six blame attributions (victim, self, other, environment, society and chance) on a six-point scale with "1" being not at all to blame and "6" being high level of blame. From this question, several results were obtained. First, the presence or absence of blame attributions was identified (yes/no) for each attributions. Second, the level of blame for each attribution was obtained from the rating scale (1 - not at all to blame to 6 - high level of blame). And third, the number of blame attributions that each subject made for the murder of their family member was determined by tallying the number of each attribution which was rated 2 or above. In addition, subjects were also asked in interview question 23 whether their attributions of blame had changed ("Have your attributions of blame changed since the murder?").

In order to assess past and future control cognitions, interview questions 24 and 26, respectively, were used. Interview question 24 asked subjects, "To what extent do you feel the murder was caused by something that you could have controlled?". Subjects were asked the rate the controllability of the event on a five-point scale with "1" as completely

uncontrollable to "5" as completely controllable. Interview question 26 asked subjects, "To what extent do you think you have control over a similar event happening to yourself in the future?". Subjects were asked to rate the controllability of a future event on a five-point scale with "1" as completely uncontrollable to "5" as completely controllable.

In order to assess feelings of revenge, interview question 48 was used. Subjects were asked, "Have you ever experienced feelings of revenge and if so, when, and are you still experiencing feelings of revenge?" Subjects who answered "yes" to still experiencing feelings of revenge were placed in the revenge category and subjects who answered "no" to having never experienced feelings of revenge or who were not at present having feelings of revenge were placed in the no revenge category.

As there were no standardised measures and there was no a priori way to validate these interview questions, they will be analysed in the qualitative results.

Standardised Measures

In order to determine which assessment measures were to be used, research on victims of crime, illness, and accidents was examined. The objective was to obtain measures which were used in similar research so that comparisons could be made between the subject samples.

GHQ-28 (Goldberg, 1981)

The General Health Questionnaire-28 (GHQ-28) (see Appendix A) is a self-report of emotional disorder comprised of four sub-scales which measure: (1) somatic symptoms, (2) anxiety/insomnia, (3) social dysfunction, and (4) severe depression. Subjects are presented with 28 questions (seven for each sub-scale) to determine the extent to which the symptom identified in the question has been experienced during the past few weeks. A 4-point rating scale is used. The total score is derived from summing the point value for each individual question (range: 0 - 84). The total scores for each sub-scale are derived from summing the point values for the seven questions in the sub-scale section (range: 0 - 21). In order to determine whether subjects are experiencing "unhealthy" psychological disorders, the GHQ-28 has threshold scores for each of the four sub-scales and for the total. The "caseness" threshold scores for the four sub-scales is 9/10 and for the total score 39/40 (GHQ-28 user manual).

This measure was chosen in order to determine the presence of psychological disorders and to measure the emotional state in bereaved family members. In addition, this specific form

of the GHQ was chosen because it includes the four sub-scales, which other GHQ's (30 & 60) do not; and it is the form most commonly used for research purposes.

Profile of Mood States (Lorr & McNair, 1984)

The Profile of Mood States Bi-Polar Form (POMS-BI) (see Appendix A) is a self-report measure of subjective mood states. It is comprised of six bipolar mood state scales in which one end of the scale indicates the positive mood and the other end of the scale indicates the negative mood. Each of the six scales contains twelve adjectives or phrases (total = 72 adjectives or phrases) which define each mood state. The mood states tested are: (1) composed - anxious scale, (2) agreeable - hostile scale, (3) elated - depressed scale, (4) confident - unsure scale, (5) energetic - tired scale, and (6) clearheaded - confused scale. Subjects are required to read each adjective or phrase and determine if they have felt the mood indicated during the past week, including today. The choices are: much unlike this (scored 0), slightly unlike this (scored 1), slightly like this (scored 2) and much like this (scored 3). Scoring of the items is from 0 - 3 as shown above. In order to determine the total score for each scale, six scoring templates were used. There are six positive adjectives/phrases and six negative adjective/phrases for each scale. The total scores for the six scales are derived by the formula:

$S_{total} = S_{positive} - S_{negative} + 18$ **(a constant used to insure that all the total scores are positive)**

Each scale has a possible range from 0 - 36.

It is also possible to measure positive and negative affect using the POMS-BI. Positive affect is derived from the sum of the item scores of the positive adjectives/phrases on each of the scales: composed, agreeable, elated, confident, energetic and clearheaded. Negative affect is derived from the sum of the item scores of the negative adjectives/phrases on each of the scales: anxious, hostile, depressed, unsure, tired, and confused. These scores can then be converted to z-scores using the mean positive score of 66.37 (sd = 14.12) and the mean negative score of 36.29 (sd = 18.00)[1]. These scores can, in turn, be compared to subjects from other populations.

[1] These means and standard deviations are derived from a study by Lorr & Wunderlich (1988) investigating positive and negative affect. Subjects were 102 high school students who completed the POMS-BI. This study is referenced in the user's manual for the POMS-BI (Lorr & McNair, 1984).

This measure was chosen in order to assess mood of bereaved subjects after the murder of their family member. In addition, the bi-polar form was chosen over the mono-polar form because it was judged that both positive and negative affect should be assessed.

Impact of Event Scale (Horowitz, Wilner & Alvarez, 1979)

The Impact of Event Scale (IES) (see Appendix A) is a self-report measure used to identify the presence of two key components of post-traumatic stress disorder: (1) intrusive thoughts related to the event (e.g., feelings and dreams) and (2) avoidance of thoughts, cues or situations related to the event. The measure is composed of 15 statements in which subjects are asked to determine how often they have experienced the process referred to during the past seven days. Subjects choose the most appropriate response based on a scale from: not at all (scored 0), rarely experienced (scored 1), sometimes experienced (scored 3), to often experienced (scored 5). The total score is derived from summing the point values for each individual item (range: 0 -75). An intrusive sub-scale score is derived from summing the point values for the questions 1, 4, 5, 6, 10, 11 and 14 (range: 0 - 35). An avoidance sub-scale score is derived from summing the point values for the questions 2, 3, 7, 8, 9, 12, 13, and 15 (range: 0 - 40). Scores on the sub-scales for the IES that are below nine are considered to be low presence of intrusion or avoidance, scores between ten and nineteen are considered medium, while scores above twenty are considered to be high presence of intrusion and avoidance. Scores on the IES total are regarded as above threshold, showing high levels of intrusion and avoidance, when the total reaches thirty-five (Winje, 1996). High internal consistency has been reported for both sub-scales (intrusion = .78; avoidance = .82) (Horowitz, Wilner & Alvarez, 1979).

This measure was chosen in order to determine if this sample of secondary victims of murder suffer from intrusive and avoidance thoughts related to the murder of their family member.

Just World Scale (Rubin & Peplau, 1975)

The Just World Scale (JWS) (see Appendix A) is a self-report measure used to assess a person's level of agreement or disagreement that the world is a just, orderly, and controllable place. The measure consists of 20 statements regarding the "justness" of certain situations. Subjects are required to rate their level of agreement or disagreement with each statement on a 6-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. There are 11

"just" questions (2, 3, 6, 7, 9, 11, 12, 14, 15, 18 and 19) and 9 "unjust" questions (1, 4, 5, 8, 10, 13, 16, 17 and 20). Just questions are scored in the following manner: a response of 1 (strongly disagree) is scored '5' along a continuum to a response of 6 (strongly agree) which is scored '0'. Unjust questions are scored the following: a response of 1 (strongly disagree) is scored '0' along a continuum to a response of 6 (strongly agree) which is scored '5'. The total score and the total scores for the just and unjust questions are derived from summing the point values for each individual question.

This measure was chosen in order to determine if the murder of a family member affects the relatives' belief system, in terms of whether or not the world is a just place.

Subjects

Procedure to Obtain Subjects

The support group "Families of Murdered Children" (F.O.M.C.) in Glasgow, Scotland was formed by a family after their daughter was murdered in 1991. The family had previously turned to agencies in the area but were informed that no agency had the expertise to assist them with the kinds of problems they were experiencing related to their bereavement. The organisation offers peer support (it does not offer professional support by counselling personnel) to anyone who has lost a significant other to murder; it does not have to be a child that has been murdered.

F.O.M.C. was contacted by letter to arrange a meeting to discuss the research project and to ask for support group members' participation in the study. A meeting with the founder, several other support group members, and the researcher was organised. Permission was obtained to solicit volunteers for the project through a letter which would be distributed during support meetings or sent to members who could not attend and previous members.

Seventy-nine subjects responded to the letter and agreed to participate. All the subjects had lost a family member through murder.[2] It was decided that no subject would be excluded from the study on the basis of the circumstances surrounding the murder (e.g., level of victim responsibility).

---

[2] It should be noted that the term "murder" is based on the subjects' definition of the incident and not necessarily the definition employed by the criminal justice system. The choice to use the subjects' definition was based on the fact that although some cases are charged as lesser crimes (e.g., culpable homicide, serious assault), the relatives of the deceased still perceive the victim as having been murdered.

Subjects who responded were sent a thank-you letter for agreeing to participate and explaining that they would be contacted when the project was ready to begin to arrange a mutually convenient time for an interview. Before the interview was scheduled, subjects were sent the personal information sheet (see Appendix A). This was to be completed and returned to the researcher before the interviews were conducted.

Thirty-four family members bereaved through murder, which represented 43% of the original seventy-nine family members who expressed participation interest, completed the study. Forty-five family members were not included in the study for several reasons: (1) death, (2) family member's written or verbal request not to be included, and (3) repeated failure of family member to return interview scheduling time-table. Records from F.O.M.C. showed that eighty-three people were on their mailing/contact list (having either past contact with the group or were presently involved with the group) and twenty-six of the subjects for this study were on the mailing/contact list, representing 31% of the group's past/current members. The additional eight subjects were referred by participating subjects. F.O.M.C. records revealed that the mailing/contact list consisted of family members of fifty-three individual murders and sixteen of these murders were represented by the subjects which participated in this study (30.19%).

Subject Sample Obtained

Summary statistics of demographic and crime information are given in Table 4-1.2. The sample consisted of thirty-four subjects in which twenty were females and fourteen were males. Their mean age was 43.56 (SD. 13.33). All, except one of the murders occurred during 1990 to 1994 with the majority having occurred since 1993. One incident occurred during 1975. All of the subjects were Caucasian and most subjects were married (22). Nineteen subjects were in some form of employment or in full-time education at the time of interview while fifteen were either unemployed or retired. The majority of the subjects were parents (19); seven of the subjects were siblings of the deceased; a further three were sons or daughters of the deceased; one subject was the wife of the deceased; and the remainder (4) were more distant relatives.

Table 4.1. - Demographic and Crime Information

N = 34

Characteristics of the Subjects	
Mean age	43.56 (SD. 13.33)
Gender	
Male	14 (41.20%)
Female	20 (58.80%)
Religion	
None	8 (23.5%)
Roman Catholic	13 (38.2%)
Protestant	13 (38.2%)
Marital Status	
Single	6 (17.6%)
Married	22 (64.7%)
Divorced	4 (11.8%)
Widow/er	2 (5.9%)
Employment Status	
Student	4 (11.8%)
Part-time Employed	5 (14.7%)
Full-time Employed	10 (29.4%)
Unemployed	10 (29.4%)
Retired	5 (14.7%)
Relationship to Victim	
Mother	11 (32.4%)
Father	8 (23.5%)
Sister	4 (11.8%)
Brother	3 (8.8%)
Daughter	2 (5.9%)
Son	1 (2.9%)
Wife	1 (2.9%)
Granddaughter	1 (2.9%)
Step-Father	1 (2.9%)
Mother-in-law	1 (2.9%)
Father-in-law	1 (2.9%)

table continued

Demographic and Crime Information Table 4.1. *continued*

Characteristics of Subjects

Support/Non-Support[3]

	Yes	No
Total	13 (31%)	21 (62%)
Male	4 (31%)	10 (48%)
Female	9 (69%)	11 (52%)
1975	0	3
1990	3	4
1991	2	2
1992	1	1
1993	5	8
1994	2	3

Characteristics of the Crime

Total Number of Individual Murders 16

Year of Crime

1975	3 (8.8%)
1990	7 (20.6%)
1991	4 (11.8%)
1992	2 (5.9%)
1993	13 (38.2%)
1994	5 (14.7%)

Court Outcome

Unresolved	7 (20.6%)
Not Guilty	4 (11.8%)
Not Proven	1 (2.9%)
Guilty	22 (64.7%)

[3] Subjects were deemed as "support seeking" is they were involved with F.O.M.C. at the point of interview and "non-support seeking" if they had never sought support or were not seeking support from F.O.M.C. at the interview time.

Procedure For Interview Scheduling and Completion

The study was given ethical approval by the University Ethics Committee in 1995. Based on the month in which the murder took place, subjects were preliminarily organised for interviews so as to avoid anniversary dates. The decision to organise subjects in this manner was based on two reasons. First, as stated previously, research on grief has shown that persons experiencing bereavement exhibited increased emotions and distress on the anniversary date of the death and other occasions such as birthdays and Christmas (e.g., Masters et al., 1988). Considering this point, it was determined that interviewing subjects during the month in which the murder occurred could possibly lead to confounded results due to increased levels of distress caused by the anniversary date and false conclusions being drawn, which might differ significantly from data collected from an interview at a time temporally distant from the anniversary date. Second, it was determined that, ethically speaking, as much consideration as possible should be shown to the subjects and that procedures used should avoid causing harm or exacerbating distress.

Subjects who agreed to participate in the interview study were sent a letter stating where the interviews would take place and, in addition , a time-table to be completed and returned indicating convenient days and times for their interview. Once received, subjects were telephoned to confirm the date and time selected. Subjects who did not return the timetables were selected for interviews during the next available month, again avoiding an anniversary date. These initially non-responsive subjects were sent a follow-up letter to determine if they still wished to participate. Those subjects who chose to continue participation were asked to return the updated timetable enclosed with the letter. Subjects who chose not to participate were asked to notify the researcher.

The interviews were conducted at the F.O.M.C. support group office. Subjects were interviewed individually to keep information confidential from other family members or members of the support group. Before the commencement of the interview, the purpose of the study and interview topics were outlined. Subjects were then asked for permission to tape-record the interview. If subjects agreed, a permission form was completed. All subjects agreed to have their interview tape-recorded. Confidentiality was verbally assured. Subjects were informed of their right to terminate the interview at any point.

The interviews lasted an average of two hours (ranging from forty-five minutes to three hours). Notes and observations were kept during the interview in order to collect additional qualitative data. After the completion of the interview, subjects were asked to complete the assessment measures (GHQ-28, POMS-BI, IES, & JWS). Subjects who were unable to complete the measures at the office after the interview were asked to complete them at home, on that day, and to return them to the researcher.

CHAPTER 4 - RESULTS SECTION 1

EXAMINATION OF EMOTIONAL STATE AND IMPACT OF EVENT IN SECONDARY VICTIMS OF MURDER

Reliability of Measures

Reliability analysis were carried out on the sub-scales of the four measures to assess the level of internal consistency. All of the sub-scale measures were of an acceptable level with a Cronbach's alpha of >.6, with the exception of the Just World total. The individual Cronbach alpha scores are presented in Table 4-1.1.

Table 4-1.1 - Reliability Analysis with Cronbach's Alpha

Measure	Cronbach's Alpha
GHQ-28 Somatic Symptoms	.86
GHQ-28 Anxiety/Insomnia	.91
GHQ-28 Social Dysfunction	.93
GHQ-28 Severe Depression	.91
POMS-BI Composed/Anxious	.91
POMS-BI Agreeable/Hostile	.82
POMS-BI Elated/Depressed	.91
POMS-BI Confident/Unsure	.91
POMS-BI Energetic/Tired	.69
POMS-BI Clearheaded/Confused	.93
IES Intrusion	.88
IES Avoidance	.86
JW Total	.59

Emotional State

GHQ-28

Means and standard deviations of GHQ-28 scores for the entire sample and by demographic breakdown are presented in Table 4-1.2. Chi-square analyses revealed that there were no differences in the number of subjects who scored above or below the thresholds on the GHQ-28 somatic symptoms sub-scale ($X^2(1) = 1.88$, $p = .17$), the GHQ-28 anxiety/insomnia sub-scale ($X^2(1) = 2.94$, $p = .09$), the GHQ-28 social dysfunction sub-scale ($X^2(1) = 2.94$, $p = .09$), the GHQ-28 severe depression sub-scale ($X^2(1) = .12$, $p = .73$) and the GHQ-28 total score ($X^2(1) = 2.94$, $p = .09$).

Chi-square analyses using 2 x 2 contingency tables showed that there was no association between gender and scoring above/below threshold on the GHQ-28 somatic symptoms sub-scale ($X^2(1) = .22$, $p = .64$), the GHQ-28 anxiety/insomnia sub-scale ($X^2(1) = .002$, $p = .97$), the GHQ-28 social dysfunction sub-scale ($X^2(1) = 2.25$, $p = .13$), the GHQ-28 severe depression sub-scale ($X^2(1) = 1.23$, $p = .27$) and the GHQ-28 total score ($X^2(1) = .60$, $p = .44$). Data for chi-square analyses follows.

Chi-Square 2 x 2 GHQ-28 Total

	MALE	FEMALE	
ABOVE	8	14	n = 22
BELOW	6	6	n = 12
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 GHQ-28 Somatic Symptoms

	MALE	FEMALE	
ABOVE	8	13	n = 21
BELOW	6	7	n = 13
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 GHQ-28 Anxiety/Insomnia

	MALE	FEMALE	
ABOVE	9	13	n = 22
BELOW	5	7	n = 12
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 GHQ-28 Social Dysfunction

	MALE	FEMALE	
ABOVE	7	15	n = 22
BELOW	7	5	n = 12
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 GHQ-28 Severe Depression

	MALE	FEMALE	
ABOVE	5	11	n = 16
BELOW	9	9	n = 18
	n = 14	n = 20	n = 34

Although the mean scores on all four measures were higher for female subjects than male subjects, t-tests found no significant differences between the genders on the four GHQ-28 sub-scales or total score (somatic symptoms [$t(32) = -.50$, $p = .62$], anxiety/insomnia [$t(32) = -.82$, $p = .42$], social dysfunction [$t(32) = -.77$, $p = .45$], severe depression [$t(32) = -1.87$, $p = .07$], total [$t(32) = -1.19$, $p = .24$]. Figure 4-1.1 shows mean scores on the GHQ-28 by gender.

Chi-square analyses using 2 x 2 contingency tables found no significant association between support seeking and non-support seeking and scoring above/below thresholds on the GHQ-28 somatic symptoms sub-scale ($X^2(1) = .50$, $p = .48$), the GHQ-28 anxiety/insomnia sub-scale ($X^2(1) = 3.65$, $p = .06$), the GHQ-28 social dysfunction sub-scale ($X^2(1) = 3.65$, $p = .06$) and the GHQ-28 total score ($X^2(1) = 3.65$, $p = .06$). There was, however, a significant association between support and non-support seeking and threshold scores for the GHQ-28 severe depression sub-scale ($X^2(1) = 4.15$, $p = .04$). There was a relationship between seeking or not seeking support and scoring above or below the threshold for severe depression. Mean

scores for all four measures were higher for support seekers than non-support seekers. Data for chi-square analyses follows.

Chi-Square 2 x 2 GHQ-28 Total

	SUPPORT	NON-SUPPORT	
ABOVE	11	11	n = 22
BELOW	2	10	n = 12
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 GHQ-28 Somatic Symptoms

	SUPPORT	NON-SUPPORT	
ABOVE	9	12	n = 21
BELOW	4	9	n = 13
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 GHQ-28 Anxiety/Insomnia

	SUPPORT	NON-SUPPORT	
ABOVE	11	11	n = 22
BELOW	2	10	n = 12
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 GHQ-28 Social Dysfunction

	SUPPORT	NON-SUPPORT	
ABOVE	11	11	n = 22
BELOW	2	10	n = 12
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 GHQ-28 Severe Depression

	SUPPORT	NON-SUPPORT	
ABOVE	9	7	n = 16
BELOW	4	14	n = 18
	n = 13	n = 21	n = 34

T-tests found, however, that support versus non-support seeking subjects differed significantly only on the GHQ-28 total score [t(2,32) = 2.11, p = .043]. Results from the t-tests were non-significant for the GHQ-28 somatic symptoms sub-scale [t(32) = -1.57, p = .13], the GHQ-28 anxiety/insomnia sub-scale [t(32) = -1.98, p = .06], the GHQ-28 social dysfunction sub-scale [t(32) = -1.73, p = . 09], and the GHQ-28 severe depression sub-scale [t(32) = -1.81, p = .08]. Figure 4-1.2 shows GHQ-28 results by support vs. non-support seeking.

One-way analysis of variance found a significant main effect of bereavement year on the level of GHQ-28 social dysfunction [F(5,28) = 2.74, p = .04], yet Sheffe post-hoc test showed no significant differences between any pair comparisons of bereavement year. Further one-way analysis of variance indicated no significant differences between any year group on the GHQ-28 somatic symptoms sub-scale [F(5,28) = 2.13, p = .09], the GHQ-28 anxiety/insomnia sub-scale [F(5,28) = 1.81, p = .14], the GHQ-28 severe depression sub-scale [F(5,28) = 1.55, p = .21], and the GHQ-28 total score [F(5,28) = 2.11, p = .09].

Table 4-1.2. Means and Standard Deviations of GHQ-28 for Entire Sample and for Sub-Groups

	Som. Sym.	Anx./Ins.	Soc. Dys.	Sev. Dep.	Total
Entire Sample (34)	11.15 (4.86)	12.65 (5.12)	12.21 (4.90)	9.68 (5.90)	45.68 (17.81)
Gender					
Male (14)	10.64 (4.52)	11.79 (5.47)	11.43 (5.08)	7.50 (5.96)	41.36 (18.71)
Female (20)	11.50 (5.17)	13.25 (4.92)	12.75 (4.81)	11.20 (5.50)	48.70 (16.97)
Support					
Yes (13)	12.77 (4.78)	14.77 (4.11)	14.00 (4.64)	11.92 (5.45)	53.46 (15.10)
No (21)	10.14 (4.74)	11.33 (5.33)	11.10 (4.82)	8.23 (5.86)	40.86 (17.96)
Year					
1975 (3)	6.00 (2.00)	8.00 (1.73)	6.67 (0.58)	5.00 (1.00)	25.67 (3.06)
1990 (7)	10.14 (5.46)	13.00 (3.32)	10.14 (6.09)	7.71 (5.74)	41.00 (16.51)
1991 (4)	10.00 (4.69)	13.50 (6.61)	11.00 (3.74)	15.00 (4.32)	49.50 (17.67)
1992 (2)	10.00 (5.66)	14.00 (5.66)	10.50 (3.54)	8.00 (5.66)	42.50 (20.51)
1993 (13)	11.54 (4.20)	11.23 (5.80)	13.46 (3.43)	9.39 (6.44)	45.62 (17.62)
1994 (5)	16.00 (4.12)	17.40 (1.95)	16.80 (5.26)	12.40 (5.37)	62.60 (14.67)

Som. Sym. = Somatic Symptoms
Anx./Ins. = Anxiety/Insomnia
Soc. Dys. = Social Dysfunction
Sev. Dep. = Severe Depression

POMS-BI

Means and standard deviations of POMS-BI scores for the entire sample and by demographic breakdown are presented in Table 4-1.3 and Table 4-1.4. In addition, three sets of mean scores from other studies are presented for comparison purposes. Mean scores for the entire sample revealed markedly different scores for the current sample as compared to the psychiatric outpatients and "normals" (162 high school students) (Lorr & McNair, 1984). As low scores on the scales indicate the negative mood and high scores indicate the positive mood, these comparisons showed that the current sample is more prone to the negative mood state than either of the two comparative samples. In addition, the current sample had much lower levels of positive affect and much higher levels of negative affect than the "normal" comparison group (102 high school students) (Lorr & Wunderlich, 1988).

Gender analyses showed that female subjects had strikingly lower scores than male subjects on all six POMS-BI scales, indicating more negative mood states. T-tests demonstrated significant differences between female and male subjects on the POMS-BI scale 1-composed/anxious [t(32)=2.38, p=.028)], the POMS-BI scale 2-agreeable/hostile [t(32)=2.20, p=.035], the POMS-BI scale 3-elated/depressed [t(32)=2.64, p=.017], the POMS-BI scale 4-confident/unsure [t(32)=2.17, p=.038] and the POMS-BI scale 6-clearheaded/confused [t(32)=2.11, p=.043]. No significant difference arose between genders on the POMS-BI scale 5-energetic/tired [t(32) = 1.44, p = .16]. Results indicated that female subjects were experiencing more negative mood states on these scales than male subjects. In addition, female subjects had much lower positive affect scores and much higher negative affect scores than male subjects. T-tests revealed, however, that female subjects differed significantly from male subjects only on the POMS-BI negative affect [t(32)=-.2.92, p=.009], but not on the POMS-BI positive affect [t(32) = 1.75, p = .09]. The POMS-BI results suggested that female subjects were exhibiting a more overall negative affect than male subjects. Figure 4-1.1 shows mean scores of the POMS-BI scales and positive/negative affect by gender.

Mean scores on the POMS-BI six scales for support seeking subjects were lower than those for non-support seeking subjects. In addition, support seeking subjects had lower mean scores for the POMS-BI positive affect and higher mean scores for the POMS-BI negative affect than non-support seeking subjects. Although support seeking subjects had lower mean

scores, t-tests revealed only one significant difference between the two groups. Support seeking subjects had significantly lower scores on the POMS-BI scale 3-elated/depressed than non-support seeking subjects [t(32)= 2.56, p=.016], indicating that support seeking subjects were more depressed than non-support seeking subjects. No significant differences were seen between support seekers and non-support seekers on the POMS-BI scale 1-composed/anxious [t(32) = 1.91, p = .07], the POMS-BI scale 2-agreeable/hostile [t(32) = .88, p = .39], the POMS-BI scale 4-confident/unsure [t(32) = 1.11, p = .28], the POMS-BI scale 5-energetic/tired [t(32) = 1.15, p = .26] and the POMS-BI scale 6-clearheaded/confused [t(32) = .68, p = .50]. In addition, no significant differences emerged between support seekers and non-support seekers on POMS-BI positive affect [t(32) = 1.70, p = .10] or POMS-BI negative affect [t(32) = -1.41, p = .17]. Figure 4-1.2 shows mean POMS-BI scale scores by support.

Analysis for the year breakdowns (1975; 1990-1994), revealed low mean scores on the six POMS-BI scales for subjects bereaved in 1990 to 1994. These subjects also had low mean scores on the POMS-BI positive affect and high mean scores on the POMS-BI negative affect. Subjects bereaved in 1975, however, had higher mean scores on the six POMS-BI scales, higher mean scores on the POMS-BI positive affect, and lower mean scores on the POMS-BI negative affect than subjects bereaved in 1990 to 1994, suggestive of more positive mood states. One-way analysis of variance showed that there were significant differences between year groups only on the POMS-BI positive affect. The analysis revealed that subjects bereaved in 1994 had significantly lower levels of positive affect than those bereaved in 1975 [F(5,28)=2.71, p=.041], Scheffe test = p<.05. A significant main effect for bereavement year emerged on the POMS-BI scale 1-composed/anxious [F(5,28)=3.01, p = .03], yet a post hoc Sheffe test revealed no significant pair comparison differences between bereavement years. No significant differences, however, occurred between year groups on the POMS-BI negative affect [F(5,28) = 1.07, p = .40], the POMS-BI scale 2-agreeable/hostile [F(5,28) = 1.94, p = .12], the POMS-BI scale 3-elated/depressed [F(5.28) = 1.81, p = .14], the POMS-BI scale 4-confident/unsure [F(5,28) = 1.44, p = .24], the POMS-BI scale 5-energetic/tired [F(5,28) = .70, p = .63] and the POMS-BI scale 6-clearheaded/confused [F(5,28) = 1.35, p = .27].

Table 4-1.3. Means and Standard Deviations of POMS-BI Scales 1-6 for Entire Sample, for Sub-Groups and Comparative Studies

	Composed/ Anxious	Agreeable/ Hostile	Elated/ Depressed	Confident/ Unsure	Energetic/ Tired	Clearheaded/ Confused
***Psychiatric Outpatients** (68)	16.78 (9.66)	23.31 (8.66)	16.94 (10.37)	16.46 (8.42)	17.34 (9.62)	21.32 (9.38)
***Normals** (192)	22.60 (7.83)	27.61 (6.46)	23.18 (7.40)	21.90 (7.13)	20.11 (8.86)	24.13 (7.08)
Entire Sample (34)	9.53 (8.49)	14.29 (6.34)	8.77 (7.97)	12.00 (8.64)	8.79 (6.86)	13.06 (9.58)
Gender						
Male (14)	13.71 (10.06)	17.00 (7.17)	13.07 (9.74)	15.64 (9.77)	10.93 (8.25)	17.00 (10.6)
Female (20)	6.60 (5.83)	12.40 (5.04)	5.75 (5.06)	9.45 (6.92)	7.30 (5.43)	10.30 (7.88)
Support						
Yes (13)	6.62 (4.29)	13.23 (3.98)	5.15 (4.24)	9.92 (8.07)	7.07 (6.34)	11.77 (7.07)
No (21)	11.33 (9.94)	14.95 (7.45)	11.00 (8.96)	13.29 (8.92)	9.86 (7.10)	13.86(10.9)
Year						
1975 (3)	24.67 (7.09)	21.67 (5.69)	18.67 (7.23)	22.67 (5.51)	14.00 (8.54)	25.00 (9.17)
1990 (7)	7.71 (7.06)	11.71 (5.12)	7.43 (6.65)	14.00 (8.17)	9.86 (7.08)	14.43 (8.89)
1991 (4)	8.75 (7.50)	15.25 (5.74)	8.00 (5.60)	11.75 (5.74)	9.25 (4.99)	13.00 (10.4)
1992 (2)	5.00 (7.07)	14.50 (6.36)	9.00 (9.90)	13.00 (8.49)	9.00 (8.49)	12.00 (8.49)
1993 (13)	9.46 (8.22)	15.46 (5.09)	9.77 (9.08)	9.85 (9.69)	8.38 (7.24)	11.62 (9.80)
1994 (5)	5.60 (5.37)	9.60 (8.82)	2.60 (2.70)	8.20 (7.12)	4.80 (6.30)	8.20 (7.89)

The lower end of the bi-polar scale is the NEGATIVE mood state
The higher end of the bi-polar scale is the POSITIVE mood state

* - Lorr & McNair (1984)

Table 4-1.4. Means and Standard Deviations of POMS-BI Positive Affect and Negative Affect for Entire Sample, for Sub-Groups and Comparative Studies

	POMS-BI POSITIVE AFFECT	POMS-BI NEGATIVE AFFECT
***Normals** (102)	66.37 (14.12)	36.29 (18.00)
Entire Sample (34)	33.91 (20.98)	75.35 (23.77)
Gender		
Male (14)	41.21 (23.51)	61.43 (27.73)
Female (20)	28.80 (17.87)	85.10 (14.59)
Support		
Yes (13)	27.23 (12.98)	81.62 (13.91)
No (21)	38.05 (24.04)	71.48 (27.84)
Year		
1975 (3)	66.67 (23.80)	48.00 (27.62)
1990 (7)	33.14 (16.34)	76.00 (20.49)
1991 (4)	34.00 (13.88)	76.00 (17.96)
1992 (2)	39.00 (24.04)	84.50 (24.75)
1993 (13)	32.46 (20.02)	75.62 (27.29)
1994 (5)	17.00 (16.48)	86.00 (16.61)

* - Lorr & Wunderlich (1988)

Event-Related Distress

IES

Means and standard deviations of IES scores for the entire sample and by demographic breakdown are presented in Table 4-1.5. In addition, three sets of mean scores from other studies are presented for comparison purposes. Comparisons between the "norms" from the Horowitz et al. (1979) study and the present subject sample, however, yield large differences in the means on the two IES sub-scales and total. The mean scores on the IES sub-scale 1 (intrusion), sub-scale 2 (avoidance) and the total were very similar to those of the two studies with relatives of murder victims (Amick-McMullan et al., 1988; Rynearson & McCreery, 1993). Mean scores for the present study were marginally higher than those from the Amick-McMullan et al. (1988) study and slightly lower than those from the Rynearson & McCreery (1993) study[4].

Chi-square analyses revealed significant differences in the number of subject scoring above or below the thresholds on the IES intrusion sub-scale ($X^2(1) = 9.53$, $p = .002$) as twenty-six subjects scored above the threshold and eight subjects scored below threshold and the IES total score ($X^2(1) = 4.24$, $p = .04$) as twenty-three subjects scored above the threshold and eleven subjects scored below threshold. No significant differences arose on the IES avoidance behaviours sub-scale ($X^2(1) = .00$, $p = 1.00$).

Chi-square analyses using 2 x 2 contingency tables revealed a significant association between gender and scoring above/below the threshold set for the IES avoidance sub-scale ($X^2(1) = .4.37$, $p = .04$), but no significant associations between the two on the IES intrusion sub-scale ($X^2(1) = 1.96$, $p = .16$) or the IES total score ($X^2(1) = 3.39$, $p = .07$).

---

[4] The higher mean scores from the Rynearson & McCreery (1993) study as compared to the present subject sample could be because the subjects in the Rynearson & McCreery study are involved in psychiatric counselling and subjects from the present study are seeking support from a peer-support group which does not include professional counselling.

Chi-Square 2 x 2 IES Total

	MALE	FEMALE	
ABOVE	7	16	n = 23
BELOW	7	4	n = 11
	n = 14	n = 20	n = 34

Chi-Square 2 x2 IES Intrusion

	MALE	FEMALE	
ABOVE	9	17	n = 16
BELOW	5	3	n = 8
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 IES Avoidance

	MALE	FEMALE	
ABOVE	4	13	n = 17
BELOW	10	7	n = 17
	n = 14	n = 20	n = 34

Although the mean scores for female subjects were higher than those of the male subjects, t-tests showed that they differed significantly only on the IES sub-scale 1 (intrusive thoughts) [$t(24) = -2.21$, $p = .04$]. No significant differences emerged between genders on the IES avoidance behaviour sub-scale [$t(32) = -1.05$, $p = .30$] of the IES total score [$t(32) = -1.80$, $p = .08$]. Figure 4-1.1 shows mean IES scores by gender.

Chi-square analyses using 2 x 2 contingency tables revealed no significant associations between support and non-support seeking and scoring above/below thresholds on the IES intrusive thoughts sub-scale ($X^2(1) = 2.93$, $p = .09$), the IES avoidance behaviours sub-scale ($X^2(1) = 3.11$, $p = .08$) or the IES total score ($X^2(1) = 2.77$, $p = .10$).

Chi-Square 2 x 2 IES Total

	SUPPORT	NON-SUPPORT	
ABOVE	11	12	n = 23
BELOW	2	9	n = 11
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 IES Intrusion

	SUPPORT	NON-SUPPORT	
ABOVE	12	14	n = 26
BELOW	1	7	n = 8
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 IES Avoidance

	SUPPORT	NON-SUPPORT	
ABOVE	9	8	n = 17
BELOW	4	13	n = 17
	n = 13	n = 21	n = 34

Support seeking subjects had significantly higher mean scores than non-seeking subjects on the IES sub-scale 1 (intrusion) [t(32)=2.98, p=.006], the IES sub-scale 2 (avoidance) [t(32)=2.13, p=.043] and on the IES total score [t(32)=2.53, p=.017], revealing that support seeking subjects were suffering from higher levels of intrusive thoughts and avoidant behaviours related to the murder of their family member.

One-way analysis of variance showed that there were no significant differences between any bereavement year on the IES intrusive thoughts sub-scale [F(5,28) = .40, p = .84], the IES avoidance behaviours sub-scale [F(5,28) = .05, p = .10] or the IES total score [F(5,28) = .12, p = .99].

Table 4-1.5. Means and Standard Deviations of IES for Entire Sample, for Sub-Groups and Comparative Studies

	Intrusive Thoughts	Avoidance Behaviours	Total
Norms[a] (110)	6.1	6.66	12.7
Homicide Relatives[b] non-patients (16)	24.6	16.9	41.3
Homicide Relatives[c] psychiatric patients (18)	28.7	19.8	48.9
Entire Sample (34)	24.91 (9.53)	18.41 (11.60)	43.32 (19.54)
Gender			
Male (14)	20.43 (11.88)	15.93 (12.80)	36.36 (23.28)
Female (20)	28.05 (5.99)	20.15 (10.67)	48.20 (15.22)
Support			
Yes (13)	29.77 (4.57)	23.54 (11.16)	53.31 (13.54)
No (21)	21.91 (10.61)	15.24 (10.95)	37.14 (20.38)
Year			
1975 (3)	19.00 (12.17)	19.00 (4.36)	38.00 (16.52)
1990 (7)	25.86 (4.91)	20.14 (12.27)	46.00 (14.88)
1991 (4)	28.00 (6.63)	18.00 (14.17)	46.00 (20.02)
1992 (2)	29.00 (5.66)	19.50 (2.12)	48.50 (7.78)
1993 (13)	24.92 (10.94)	17.46 (12.63)	42.38 (22.43)
1994 (5)	23.00 (13.73)	18.00 (15.36)	41.00 (28.15)

a = Horowitz et al. (1979)
b = Amick-McMullan et al. (1988) - no standard deviations given
c = Rynearson & McCreery (1993) - no standard deviations given

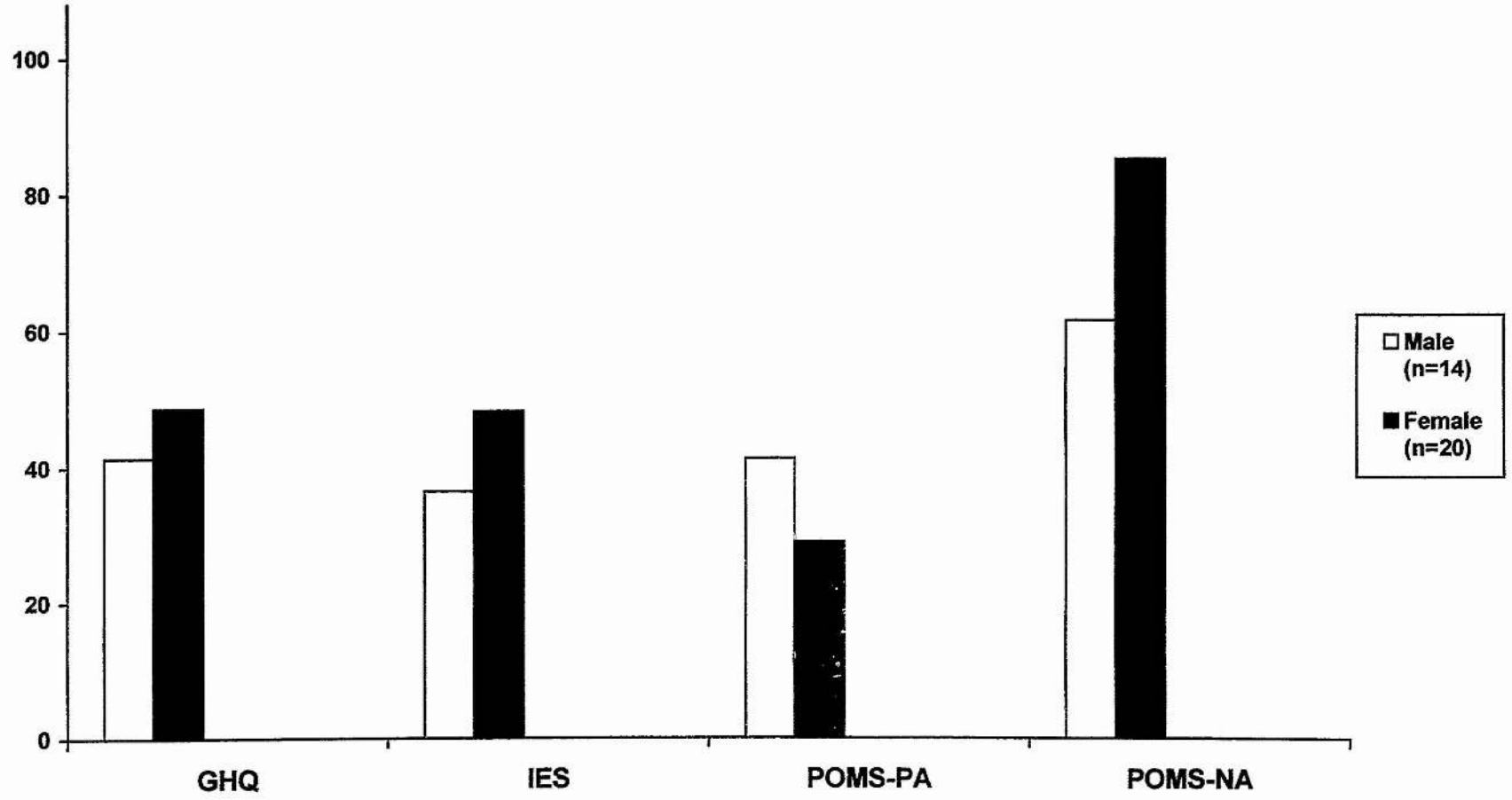


Figure 4-1.1. Mean Scores for GHQ-28 Total Score (ns), IES Total Score (ns), POMS-BI Positive Affect (ns) and Negative Affect ($p<.01$) Scores By Gender

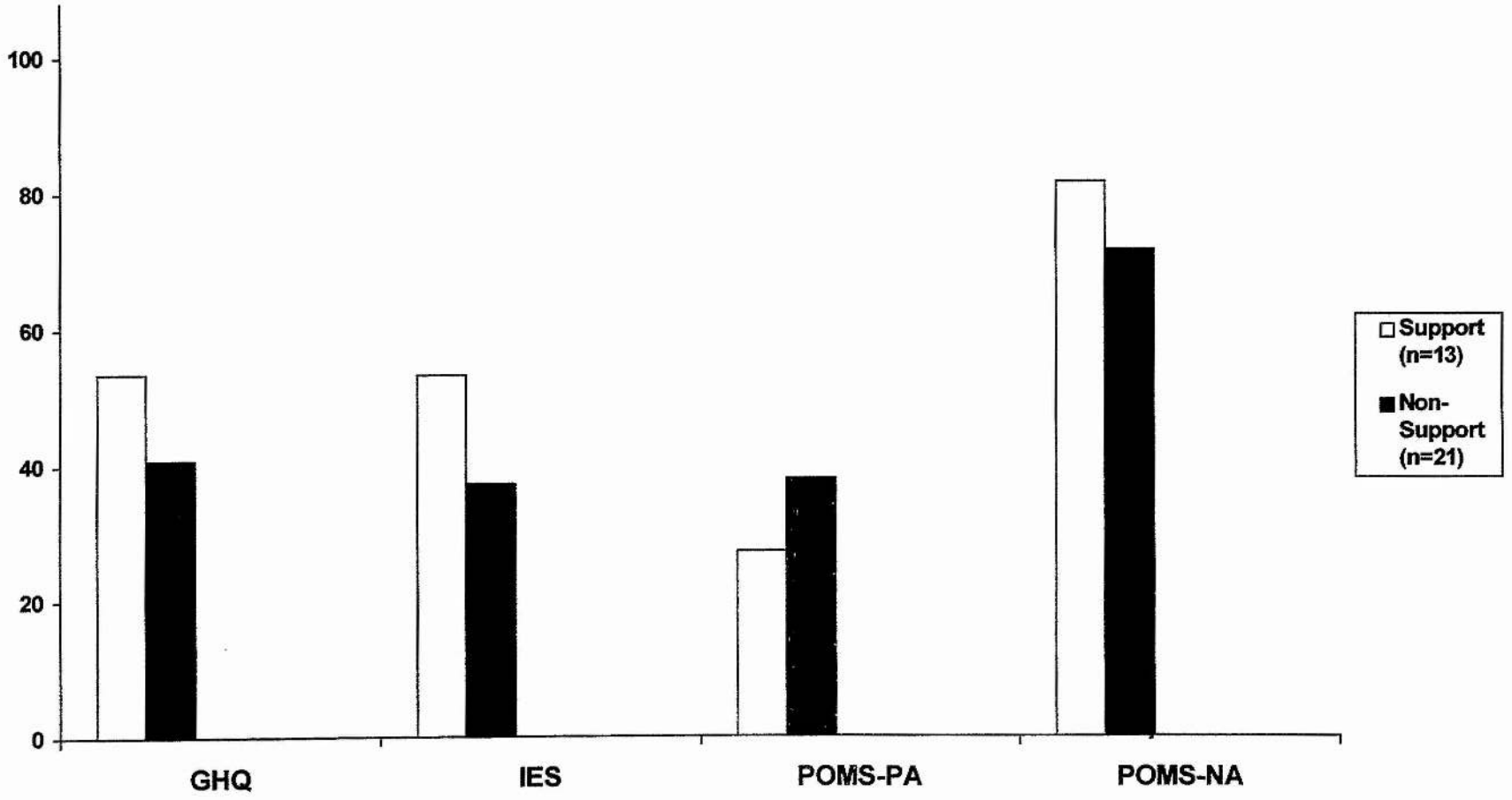


Figure 4-1.2. Mean Scores for GHQ-28 Total Score ($p<.05$), IES Total Score ($p<.05$), POMS-BI Positive Affect (ns) and Negative Affect (ns) Scores By Support

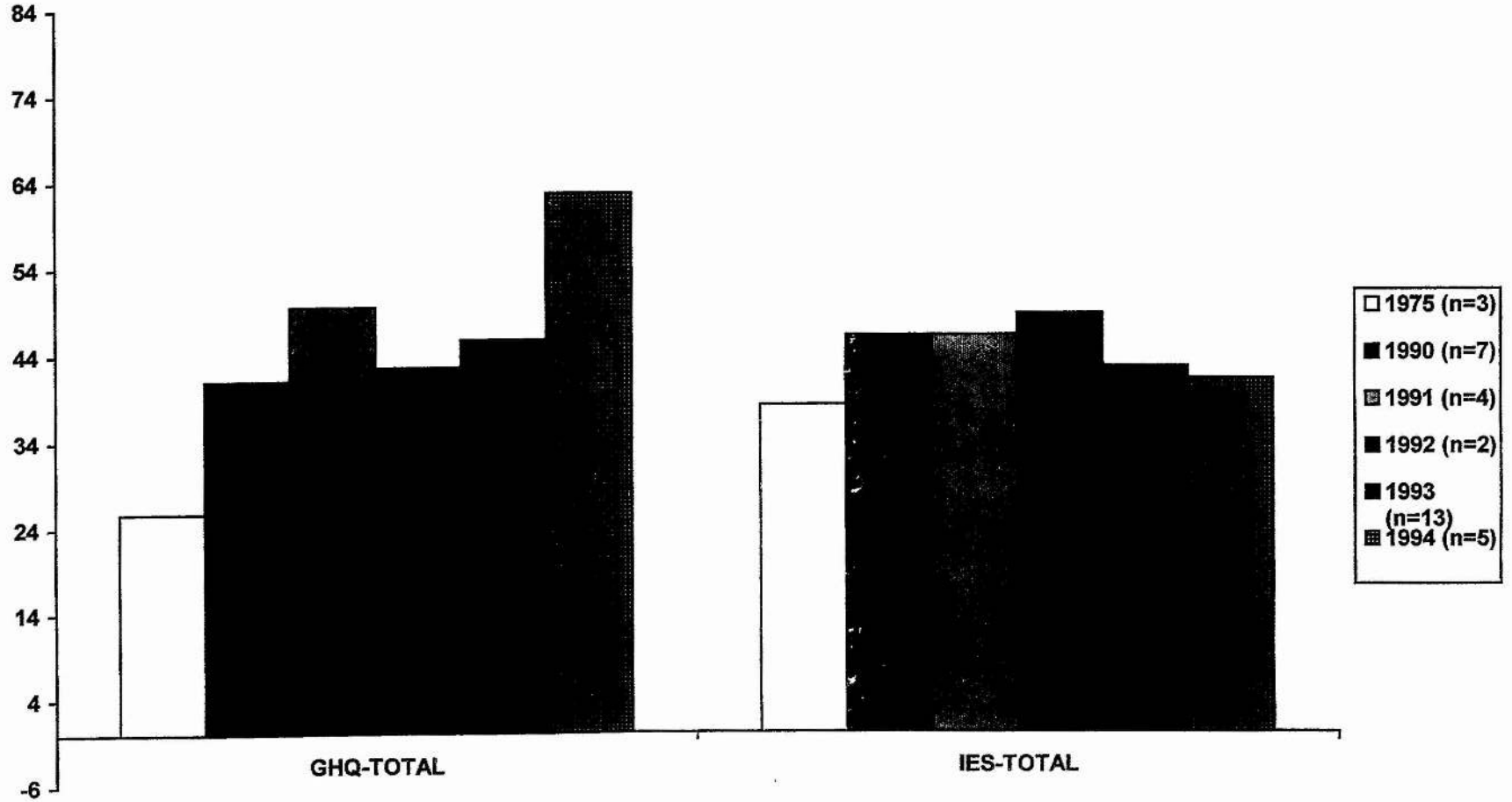


Figure 4-1.3. Mean Scores for GHQ-28 Total Score (ns) and IES Total Score (ns) By Year

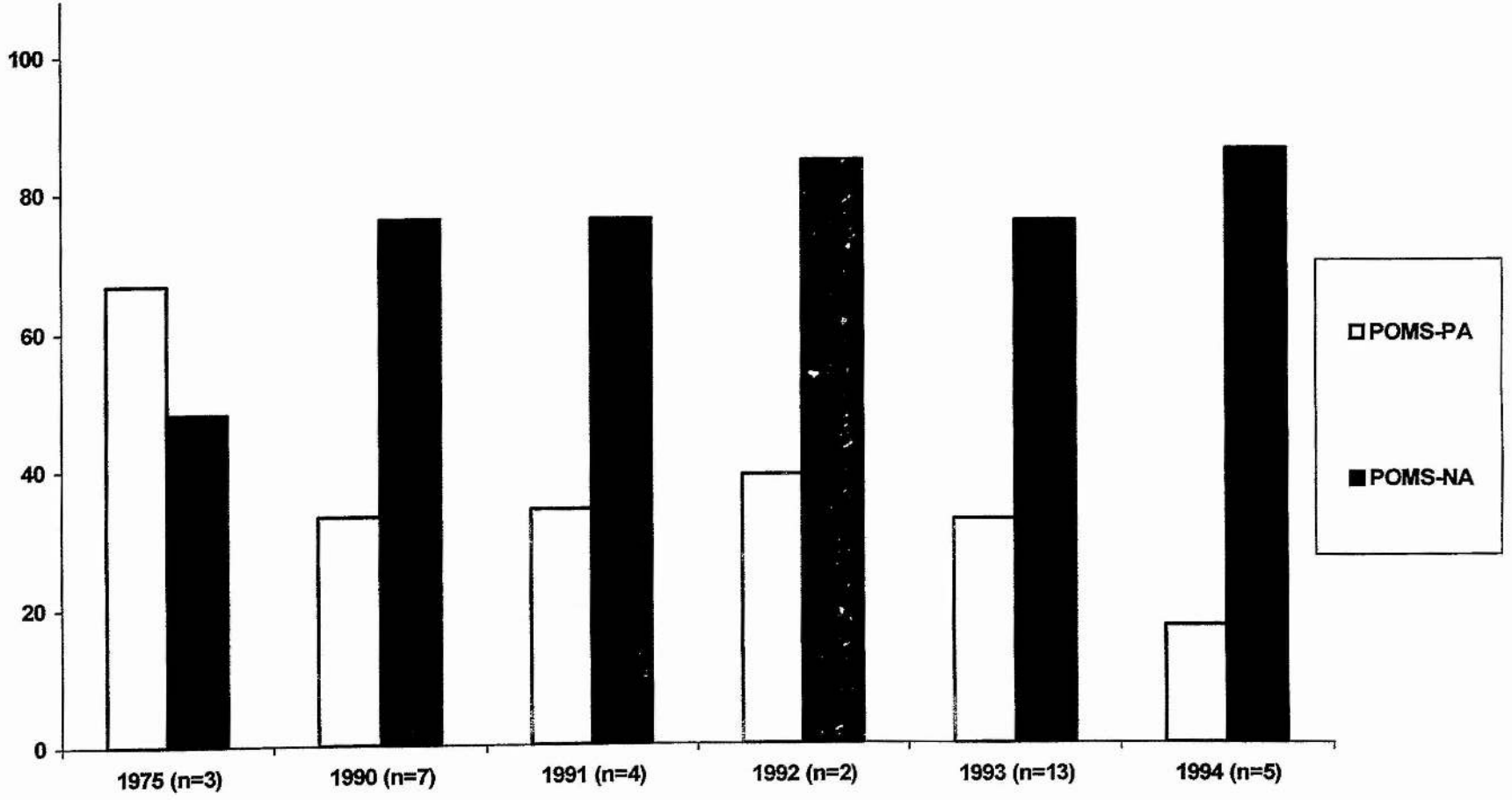


Figure 4-1.4. Mean Scores for POMS-BI Positive Affect ($p<.05$, for 1975 vs. 1994) and Negative Affect (ns) By Year

Associations and Relationships Between Demographic Variables

A Pearson's correlation[5] was conducted to determine whether the demographic variables of age and year of bereavement were related to one another. Results showed that age and year of bereavement were unrelated ($r = .31$, $p = .08$). Age was also unrelated to gender ($r = .004$, $p = .98$) and support ($r = .11$, $p = .52$). Year of bereavement was unrelated to gender ($r = .09$, $p = .63$) and support ($r = -.09$, $p = .61$). Chi-square analysis revealed that there was no association between subject gender and support/non-support seeking ($X^2(1) = .06$, $p = .80$).

Relationships Between Demographics and Depression/Distress

Pearson's correlational analyses of the four demographic attributes and the sixteen measures of emotional state and impact of event were performed to determine the relationship between these variables (see Table 4-1.6). In order to control for Type I errors due to the high number of measures used as dependent variables, Bonferroni adjustments were made. The correlations in bold in the tables remained significant after the Bonferroni adjustments.

The demographic characteristic "age" was correlated with thirteen of the sixteen measures of depression and distress. After the Bonferroni adjustment ($p < .003$), however, only the GHQ-28 sub-scales for social dysfunction, somatic symptoms and the total score remained significant.

Gender was correlated with seven of the sixteen measures of emotional state and impact of event. Only the POMS negative affect, however, remained significant after the Bonferroni adjustment ($p < .003$).

---

[5]As results obtained from point-biserial correlations are exact to those obtained from the Pearson's product moment correlations (Nunnally, 1981), it was decided to use Pearson's.

Table 4-1.6. Correlations Among Demographic Attributes and Measures of Depression and Distress

	Age	Gender	Support	Year
GHQ-Somatic Symptoms	**.53*** **	ns	ns	.44**
GHQ-Anxiety/Insomnia	.40*	ns	ns	ns
GHQ-Social Dysfunction	**.54*** **	ns	ns	**.54*** **
GHQ-Severe Depression	.34*	ns	ns	ns
GHQ-Total	**.52****	ns	.35*	.41*
IES-Intrusive Thoughts	ns	.40*	.41*	ns
IES-Avoidance Behaviours	37*	ns	.35*	ns
IES-Total	.36*	ns	.41*	ns
POMS-Composed/Anxious	-.34*	-.42*	ns	ns
POMS-Agreeable/Hostile	ns	-.36*	ns	ns
POMS-Elated/Depressed	-.41*	-.46**	-.36*	ns
POMS-Confident/Unsure	ns	-.36*	ns	-.40*
POMS-Energetic/Tired	-.37*	ns	ns	ns
POMS-Clearheaded/Confused	-.42*	-.35*	ns	-.37*
POMS-Negative Affect	.36*	.50**	ns	ns
POMS-Positive Affect	-.35*	ns	ns	-.41*

* = <.05; ** = <.01; *** = <.001; **bold = significant after Bonferroni adjustment (<.003)**

Gender coded - (1) male; (2) female; Support coded - (1) no; (2) yes; Year coded - (1) 1975; (2) 1990; (3) 1991; (4) 1992; (5) 1993; (6) 1994

Whether subjects were support seeking or non-support seeking was correlated with the GHQ-28 total score, the two IES sub-scale scores (intrusive thoughts and avoidance behaviours) and total score, and the POMS sub-scale 3 score, Table 4-1.6 showing significance levels. After the Bonferroni adjustment ($p<.003$), none of the correlations were significant.

CHAPTER 4 - RESULTS SECTION 2

ATTRIBUTIONAL SEARCHING: EMOTIONAL STATE AND EVENT-RELATED IMPACT IN RELATION TO ATTRIBUTIONS OF BLAME

RESULTS

Number of Blame Attributions Made

Frequency counts for the number of blame attributions made and the presence or absence of blame attributions in the entire sample, by gender, by support vs. non-support, and year are presented in Tables 4-2.1, 4-2.2 and 4-2.3. These counts showed that for the entire sample, subjects were blaming a minimum of two factors with a maximum of five. No subjects made zero, one or six blame attributions. The majority of the sample blamed chance (18), someone else (34), themselves (18), and society (23) for the murder of their family member. The majority of the subjects did not blame the environment (23) or the victim (33) for the murder. It should be noted that all thirty-four subjects blamed someone else (other-blame) for the murder. Only one subject blamed the victim.

Chi-square analyses using 2 x 2 contingency tables revealed that gender was not associated with presence/absence of chance blame ($X^2(1) = .00$, $p = 1.00$), presence/absence of environment blame ($X^2(1) = .06$, $p = .80$), presence/absence of society blame ($X^2(1) = .12$, $p = .73$), or presence/absence of victim blame ($X^2(1) = .72$, $p = .40$). Gender was significantly associated with presence/absence of self-blame ($X^2(1) = 5.67$, $p = .02$). The chi-square indicated that there were more male subjects who did not engage in self-blame attributions, while more female subjects had engaged in self-blame attributions. Data from chi-square analyses follows.

Chi-Square 2 x 2 Chance Blame

	MALE	FEMALE	
YES	7	10	n = 17
NO	7	10	n = 17
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 Environmental Blame

	MALE	FEMALE	
YES	5	8	n = 13
NO	9	12	n = 21
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 Self Blame

	MALE	FEMALE	
YES	4	14	n = 18
NO	10	6	n = 16
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 Societal Blame

	MALE	FEMALE	
YES	9	14	n = 23
NO	5	6	n = 11
	n = 14	n = 20	n = 34

Chi-Square 2 x 2 Victim Blame

	MALE	FEMALE	
YES	0	1	n = 1
NO	14	19	n = 33
	n = 14	n = 20	n = 34

Results from t-tests showed that females subjects (mean = 3.35, sd = .93) and male subjects (mean = 2.79, sd = .80) did not differ significantly in the number of blame attributions made overall [$t(32) = -1.84$, $p = .08$].

Table 4-2.1. Number of Blame Attributions Made and Presence/Absence of Blame Attributions for Entire Sample and By Gender

	Entire Sample (n = 34)	Female (n = 20)	Male (n = 14)
(A) No. of Factors Blamed:			
0	0	0	0
1	0	0	0
2	10	4	6
3	12	7	5
4	10	7	3
5	2	2	0
6	0	0	0
(B) Chance Blame			
YES	17	10	7
NO	17	10	7
(C) Environmental Blame			
YES	13	8	5
NO	21	12	9
(D) Other Blame			
YES	34	20	14
NO	0	0	0
(E) Self Blame			
YES	18	14	4
NO	16	6	10
(F) Societal Blame			
YES	23	14	9
NO	11	6	5
(G) Victim Blame			
YES	1	1	0
NO	33	19	14

Chi-square analyses using 2 x 2 contingency tables revealed that support/non-support seeking was not associated with the presence or absence of chance blame ($X^2(1) = 1.12$, p = .29), presence or absence of environment blame ($X^2(1) = .50$, p = .48), the presence of absence of self-blame ($X^2(1) = 2.24$, p = .13), the presence or absence of society blame ($X^2(1) = .83$, p = .36) or the presence or absence of victim blame ($X^2(1) = 1.66$, p = .20).

Chi-Square 2 x 2 Chance Blame

	SUPPORT	NON-SUPPORT	
YES	5	12	n = 17
NO	8	9	n = 17
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 Environmental Blame

	SUPPORT	NON-SUPPORT	
YES	4	9	n = 13
NO	9	12	n = 21
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 Self Blame

	SUPPORT	NON-SUPPORT	
YES	9	9	n = 18
NO	4	12	n = 16
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 Societal Blame

	SUPPORT	NON-SUPPORT	
YES	10	13	n = 23
NO	3	8	n = 11
	n = 13	n = 21	n = 34

Chi-Square 2 x 2 Victim Blame

	SUPPORT	NON-SUPPORT	
YES	1	0	n = 1
NO	12	21	n = 33
	n = 13	n = 21	n = 34

Results from t-tests showed that support seeking subjects (mean = 3.23, sd = .93) and non-support seeking subjects (mean = 3.05, sd = .92) did not differ significantly on the number of blame attributions made overall [$t(32) = -.56$, $p = .58$].

One-way analysis of variance showed that there were no significant differences among bereavement years in terms of the number of blame attributions made by each bereavement year[$F(5,28) = .91$, $p = .49$].

Table 4-2.2. Number of Blame Attributions Made and Presence/Absence of Blame Attributions by Support

	Support (n = 13)	Non-Support (n = 21)
(A) No. of Factors Blamed:		
0	0	0
1	0	0
2	3	7
3	5	7
4	4	6
5	1	1
6	0	0
(B) Chance Blame		
YES	5	12
NO	8	9
(C) Environmental Blame		
YES	4	9
NO	9	12
(D) Other Blame		
YES	13	21
NO	0	0
(E) Self Blame		
YES	9	9
NO	4	12
(F) Societal Blame		
YES	10	13
NO	3	8
(G) Victim Blame		
YES	1	0
NO	12	21

Table 4-2.3. Number of Blame Attributions Made and Presence/Absence of Blame Attributions by Year of Bereavement

	1975 (n=3)	1990 (n=7)	1991 (n=4)	1992 (n=2)	1993 (n=13)	1994 (n=5)
(A) No. of Factors Blamed:						
0	0	0	0	0	0	0
1	0	0	0	0	0	0
2	0	1	0	1	5	3
3	1	2	4	1	4	0
4	2	3	0	0	3	2
5	0	1	0	0	1	0
6	0	0	0	0	0	0
Mean	3.67 (.58)	3.57 (.98)	3.00 (--)	2.50 (.71)	3.00 (1.00)	2.80 (1.10)
(B) Chance Blame						
YES	2	3	0	0	8	4
NO	1	4	4	2	5	1
(C) Environmental Blame						
YES	2	4	1	1	4	1
NO	1	3	3	1	9	4
(D) Other Blame						
YES	3	7	4	2	13	5
NO	0	0	0	0	0	0
(E) Self Blame						
YES	2	4	3	1	7	1
NO	1	3	1	1	6	4
(F) Societal Blame						
YES	2	7	3	1	7	3
NO	1	0	1	1	6	2
(G) Victim Blame						
YES	0	0	1	0	0	0
NO	3	7	3	2	13	5

Mean Levels of Six Blame Attributions

The means and standard deviations for levels of blame for the six blame attributions (chance, environment, other, self, society, and victim) for the entire sample and demographic breakdowns are presented in Table 4-2.4. Graphical representations are presented in Figures 4-2.1, 4-2.2, 4-2.3, 4-2.4. The results for the entire subject sample revealed that these secondary victims of murder were making an average of three blame attributions for the murder of their family member. Levels of chance blame, self-blame and society blame were moderate (3.00, 3.26, and 3.68, respectively). High mean levels of other-blame were found (5.88). The sample had relatively low levels of environmental blame and victim blame (2.32 and 1.06, respectively).

The mean scores for the six blame attributions for female subjects (n=20) were higher than those of male subjects (n=14). T-tests showed, however, that the genders differed only on level of self-blame. Female subjects had significantly higher levels of self-blame than male subjects [t(32)= -.2.46, p= .020]. No significant differences emerged between genders on mean levels of chance blame [t(32) = -.31, p = .76], environment blame [t(32) = -.86, p = .40], other blame [t(32) = -.25, p = .80], society blame [t(32) = -.07. p = .94], or victim blame [t(32) = -.83, p = .411].

Support seeking subjects (n=13) had higher mean levels than non-support seeking subjects (n=21) on self-blame (3.85 vs. 2.90), societal blame (4.31 vs. 3.29) and victim blame (1.15 vs. 1.00). On the other hand, support seekers had lower mean levels than non-support seekers on chance blame (2.38 vs. 3.38), environmental blame (2.08 vs. 2.47), and other-blame (5.85 vs. 5.90). T-tests demonstrated, however, that support seeking subjects and non-support seeking subjects did not differ significantly on the level of any of the six blame attributions (chance blame [t(32) = 1.27, p = .21]; environment blame [t(32) = .58, p = .56]; other blame [t(32) = .34, p = .73]; self blame [t(32) = -1.12, p = .27]; society blame [t(32) = -1.35, p = .19]; victim blame [t(32) = -1.28, p = .21]).

One-way analysis of variance revealed only one main effect of year on mean level of blame. Year of bereavement had a significant effect on mean level of chance blame [F(5,28) = 2.86, p = .03], but no significant pair comparison differences arose. Bereavement year did not yield any other main effects on mean level of environment blame [F(5,28) = .52, p = .76], other blame [F(5,28) = 1.78, p = .15], self blame [F(5,28) = .62, p = .69], society blame [F(5,28) = .41, p = .84], or victim blame [F(5,28) = 1.65, p = .18].

Table 4-2.4 Means and Standard Deviations of Number of Blame Attributions Made and Levels of Six Blame Attributions in Entire Sample and By Gender, Support and Year

	No. of Attributions	Chance Blame	Environment Blame	Other Blame	Self Blame	Society Blame	Victim Blame
Entire Sample (34)	3.12 (.91)	3.00 (2.24)	2.32 (1.92)	5.88 (.48)	3.26 (2.39)	3.68 (2.17)	1.06 (.34)
Gender							
Male (14)	2.79 (.80)	2.86 (2.18)	2.00 (1.62)	5.86 (.54)	2.14 (2.11)	3.64 (2.37)	1.00 (--)
Female (20)	3.35 (.93)	3.10 (2.34)	2.55 (2.11)	5.90 (.45)	4.05 (2.31)	3.70 (1.10)	1.65 (1.23)
Support							
Yes (13)	3.23 (.93)	2.38 (2.02)	2.08 (1.94)	5.85 (.56)	3.85 (2.34)	4.31 (2.21)	1.15 (.56)
No (21)	3.05 (.92)	3.38 (2.33)	2.47 (1.94)	5.90 (.45)	2.90 (2.41)	3.29 (2.10)	1.00 (--)
Year							
1975 (3)	3.67 (.58)	3.67 (2.52)	2.67 (1.53)	6.00 (--)	2.67 (2.08)	3.00 (2.00)	1.00 (--)
1990 (7)	3.57 (.98)	2.00 (1.29)	3.00 (2.31)	5.43 (.98)	2.86 (2.27)	4.43 (1.81)	1.00 (--)
1991 (4)	3.00 (--)	1.00 (--)	2.00 (2.00)	6.00 (--)	4.50 (2.38)	4.25 (2.36)	1.50 (1.0)
1992 (2)	2.50 (.71)	1.00 (--)	2.50 (2.12)	6.00 (--)	3.50 (3.54)	3.00 (2.83)	1.00 (--)
1993 (13)	3.00 (1.00)	3.54 (2.37)	2.38 (2.18)	6.00 (--)	3.69 (2.59)	3.23 (2.28)	1.00(--)
1994 (5)	2.80 (1.10)	5.00 (2.34)	1.20 (.45)	6.00 (--)	2.00 (2.24)	4.00 (2.74)	1.00 (--)

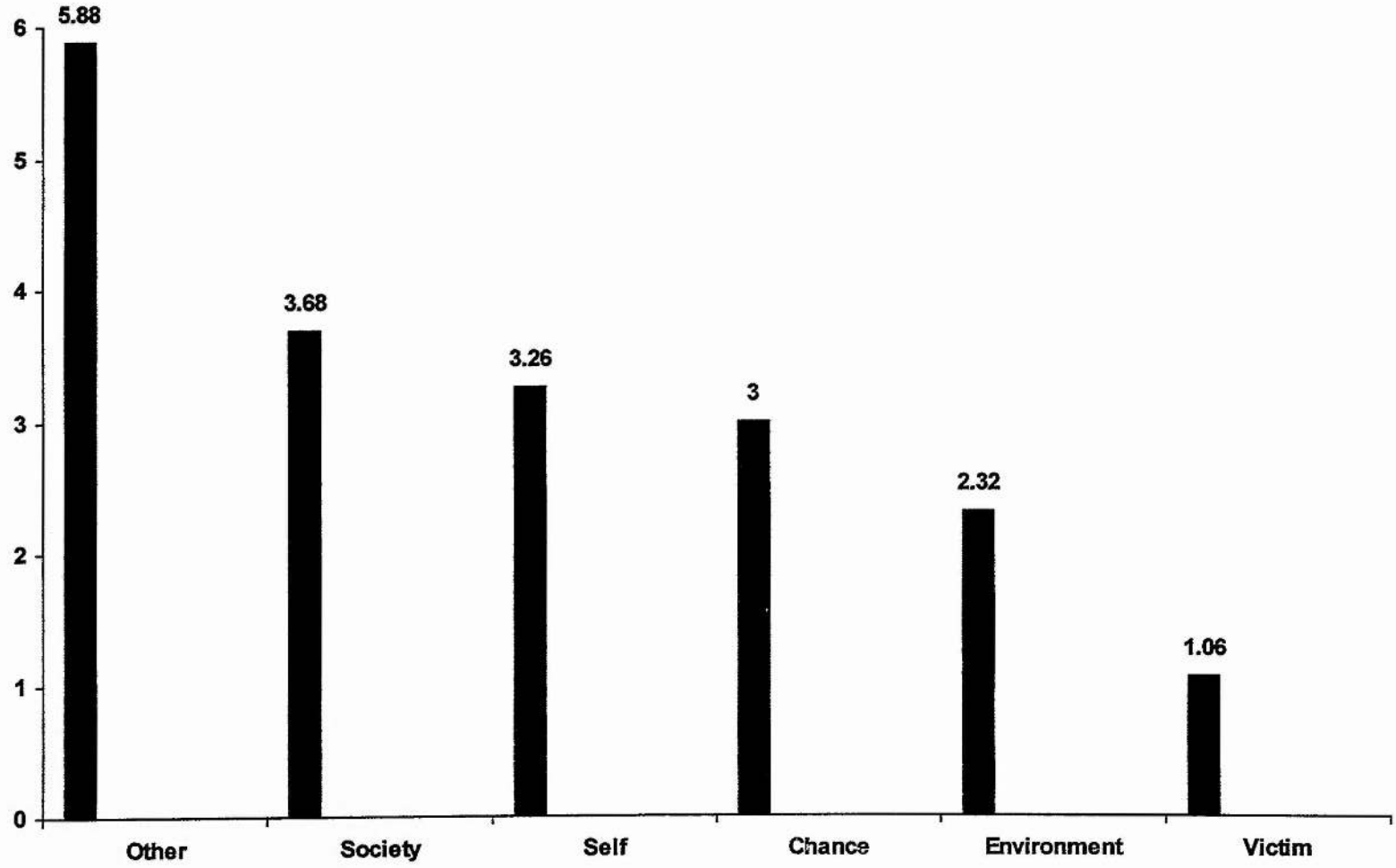


Figure 4-2.1. Mean Levels of Blame for Six Blame Attributions for Entire Sample
1 = not at all to blame
6 = high level of blame

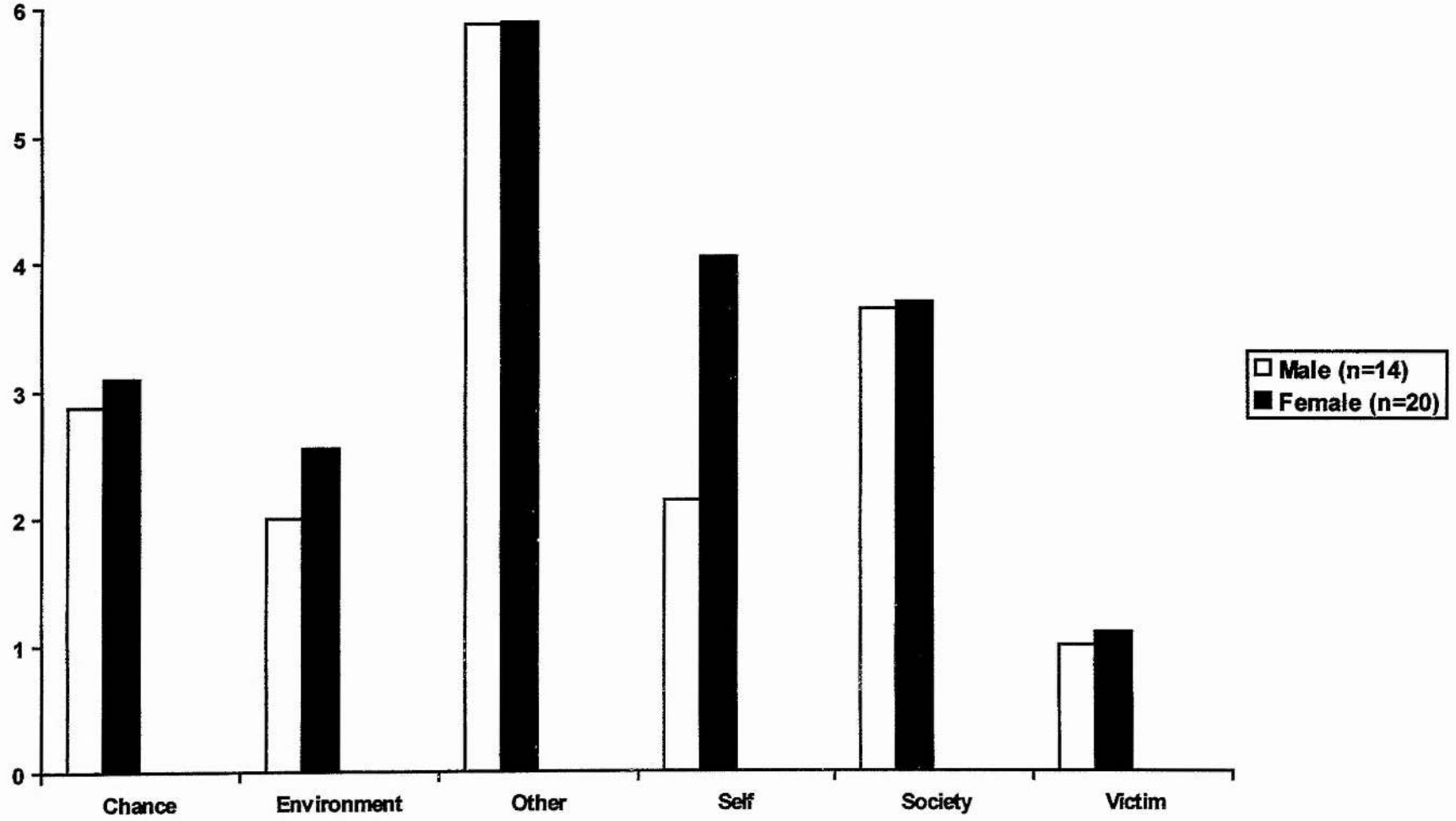


Figure 4-2.2. Mean Levels of Six Blame Attributions by Gender. The only significant result is Self-Blame ($p<.05$).
1 = not at all to blame
6 = high level of blame

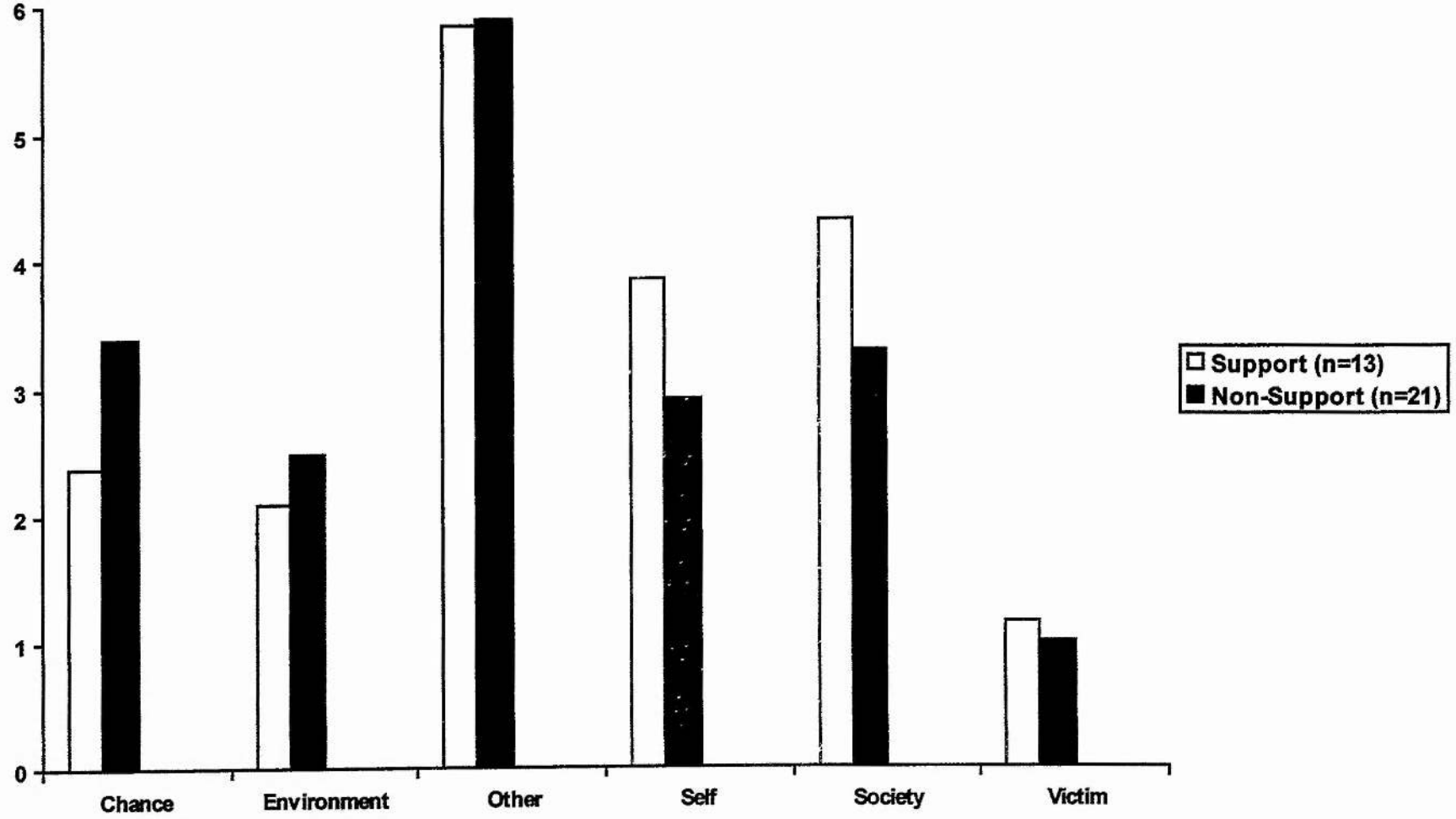


Figure 4-2.3. Mean Levels of Six Blame Attributions in Support vs. Non-Support Seeking Subjects. All results reported are non-significant.
1 = not at all to blame
6 = high level of blame

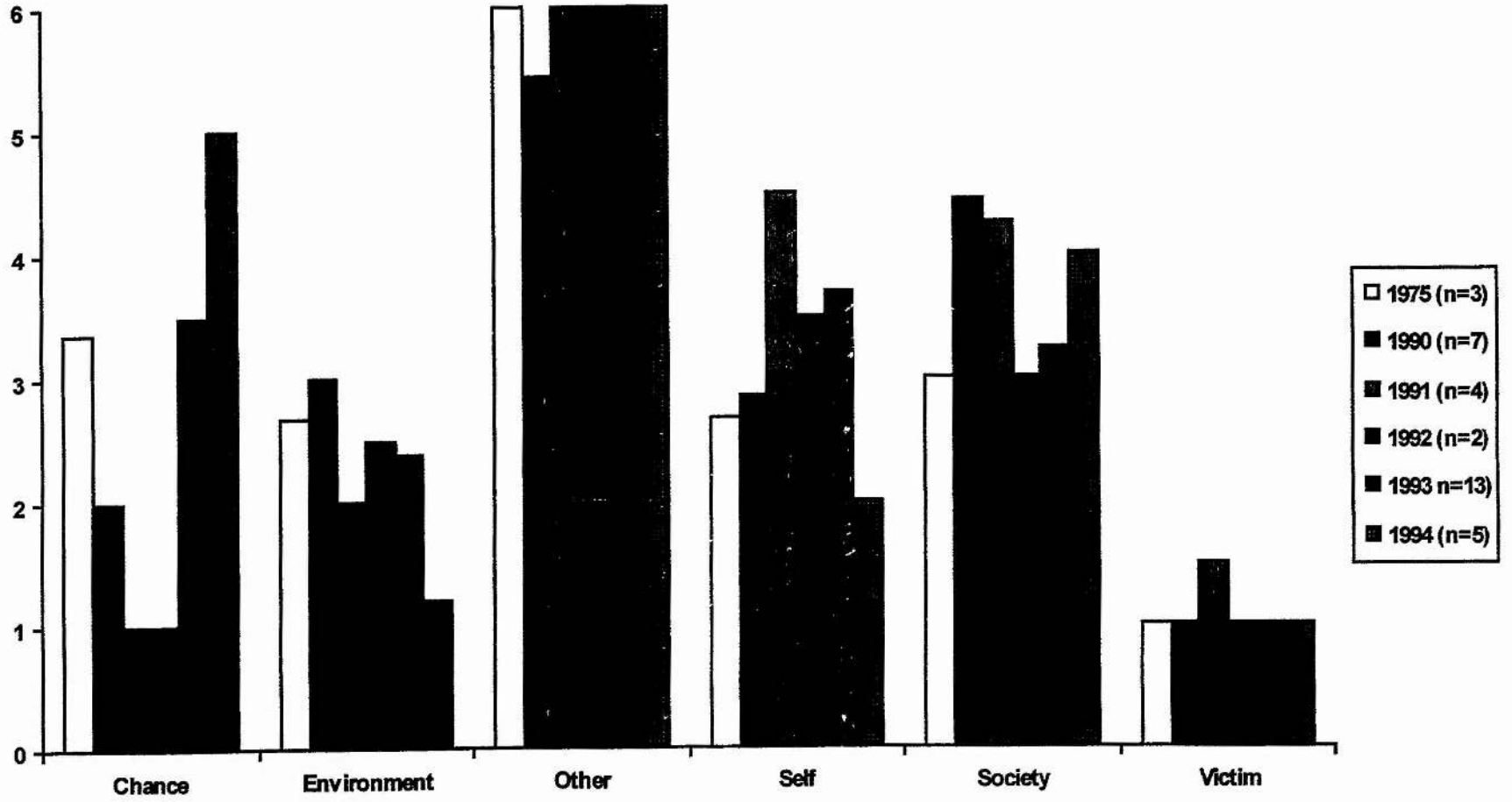


Figure 4-2.4. Mean Levels of Six Blame Attributions by Year of Bereavement. All results reported are non-significant.
1 = not at all to blame
6 = high level of blame

Correlational Analyses

A series of Pearson's correlations were performed in the following categories: (1) demographic characteristics and (2) levels of blame. These were correlated with one another as well as with the sixteen measures of emotional state and impact of event (outlined in results section 1). Due to the risk of Type I errors, Bonferroni adjustments were made as a result of the high number of variables entered into the correlations. Correlations which remained significant after the Bonferroni adjustments are presented in bold in the tables.

Relationships Between Demographic Characteristics and Levels of Blame

A Pearson's correlation was performed to determine whether demographic characteristics (age, gender, support, year) of the sample were related with levels of the six blame attributions (chance, environment, other, self, society and victim). Results indicated that neither age nor support were related to the levels of any of the six blame attributions. Gender was only correlated with level of self-blame ($r=.40$, $p=.02$), which was not significant after the Bonferroni adjustment ($p=.004$). Higher levels of self-blame were related to female subjects, while lower levels of self-blame were related to male subjects. Bereavement year was only correlated with level of chance blame ($r=.35$, $p=.04$), which was not significant after the Bonferroni adjustment. Higher levels of chance blame were related to more recent bereavement years, while lower levels of chance blame were related to bereavements occurring longer ago.

Correlations Between Attributions of Blame

A correlation was conducted to determine whether levels of blame were related to one another (see Table 4-2.5). Level of chance blame was negatively correlated with level of societal blame ($r=-.45$, $p<.01$), which remained significant after the Bonferroni adjustment ($p<.01$). Level of chance blame was not correlated with the level of any of the other blame attributions or the number of blame attributions made by subjects. Level of environmental blame was negatively correlated with level of other-blame ($r=-.49$, $p<.01$) and positively correlated with the number of blame attributions that subjects made ($r=.45$, $p<.01$). These correlations remained significant after the Bonferroni adjustment. Level of environmental blame was not correlated with levels of self-blame, societal blame or victim blame. Level of other-blame was not correlated with levels of chance blame, self-blame, societal blame, victim

Table 4-2.5. Pearson Correlations Among Levels of Attributions of Blame

	(1) Chance	(2) Envir.	(3) Other	(4) Self	(5) Society	(6) Victim	(7) Number
1. Chance Blame	--						
2. Environmental Blame	ns	--					
3. Other Blame	ns	**-.49****	--				
4. Self Blame	ns	ns	ns	--			
5. Societal Blame	**-.45****	ns	ns	.40*	--		
6. Victim Blame	ns	ns	ns	ns	ns	--	
7. No. of Factors Blamed	ns	**.45****	ns	**.43****	.40*	ns	--

* = <.05; ** = <.01; *** = <.001; ns = not significant

bold = significant after Bonferroni adjustment (<.01)

blame or the number of blame attributions made. Level of self-blame was correlated with level of societal blame ($r=.40$, $p<.05$) and the number of blame attributions made($r=.43$, $p<.01$). Only the correlation with the number of attributions made remained significant after the Bonferroni adjustment. Level of self-blame was not correlated with levels of chance blame, environmental blame, other-blame, or victim blame. Level of societal blame, in addition to the correlations with levels of chance blame and self-blame, was correlated with the number of blame attributions made ($r=.40$, $p<.05$), which did not remain significant after the Bonferroni. Level of victim blame was not correlated with the level of any of the blame attributions or the number of blame attributions made by subjects.

Correlations Between Attributions of Blame and Emotional State and Event-Related Impact

A correlation among number of blame attributions made, level of blame for six blame attributions, and the sixteen measures of emotional state and impact of event was conducted in order to determine existing relationships (see Table 4-2.6). Results from this correlation showed that level of chance blame, level of environmental blame, level of other-blame, level of victim blame, and the number of blame attributions made were not related to any of the sixteen measures of emotional state or impact of event either before the Bonferroni adjustment or after ($p<.002$). Only level of self-blame and level of societal blame were related to emotional state and impact of event. Level of self-blame was positively correlated with the GHQ-28 somatic symptoms sub-scale ($r=.47$, $p<.01$), the GHQ-28 anxiety/insomnia sub-scale ($r=.40$, $p<.05$), the GHQ-28 severe depression sub-scale ($r=.60$, $p<.001$), the GHQ-28 total score ($r=.53$, $p<.001$), the IES intrusion sub-scale ($r=.55$, $p<.001$), the IES avoidance sub-scale ($r=.56$, $p<.001$), the IES total score ($r=.60$, $p<.001$) and the POMS-BI negative affect total ($r=.49$, $p<.01$). Level of self-blame was negatively correlated with the POMS-BI composed/anxious scale ($r=-.40$, $p<.05$), the POMS-BI elated/depressed scale ($r=-.50$, $p<.01$), and the POMS-BI clearheaded/confused scale ($r=-.40$, $p<.05$). The correlation between level of self-blame and the GHQ-28 severe depression sub-scale, GHQ-28 total score, the IES intrusion sub-scale, the IES avoidance sub-scale and the IES total score remained significant after the Bonferroni adjustment. Level of societal blame was positively correlated with the GHQ-28 somatic symptoms sub-scale ($r=.47$, $p<.01$), the GHQ-28 anxiety/insomnia sub-scale ($r=.40$, $p<.05$), the GHQ-28 total ($r=.46$, $p<.01$), the IES avoidance sub-scale ($r=.48$, $p<.01$),

and the IES total ($r=.36$, $p<.05$). Only the correlation between level of societal blame and the GHQ-28 anxiety/insomnia sub-scale remained significant after the Bonferroni adjustment.

Table 4-2.6. Pearson Correlations Among Attributions of Blame and Measures of Depression and Distress

	Chance	Environment	Other	Self	Society	Victim	No. of Attributions Made
1. GHQ-Somatic Symptoms	ns	ns	ns	.47**	.47**	ns	ns
2. GHQ-Anxiety/Insomnia	ns	ns	ns	.40*	**.56*** **	ns	ns
3. GHQ-Social Dysfunction	ns	ns	ns	ns	ns	ns	ns
4. GHQ-Severe Depression	ns	ns	ns	**.60*** **	ns	ns	ns
5. GHQ-Total	ns	ns	ns	**.53*** **	.46**	ns	ns
6. IES-Intrusive Thoughts	ns	ns	ns	**.55*** **	ns	ns	ns
7. IES-Avoidance Behaviours	ns	ns	ns	**.56*** **	.48**	ns	ns
8. IES-Total	ns	ns	ns	**.60*** **	.36*	ns	ns
9. POMS-Compose/Anxious	ns	ns	ns	-.40*	ns	ns	ns
10. POMS-Agreeable/Hostile	ns	ns	ns	ns	ns	ns	ns
11. POMS-Elated/Depressed	ns	ns	ns	-.50**	ns	ns	ns
12. POMS-Confident/Unsure	ns	ns	ns	ns	ns	ns	ns
13. POMS-Energetic/Tired	ns	ns	ns	ns	ns	ns	ns
14. POMS-Clearheaded/Confused	ns	ns	ns	-.40*	ns	ns	ns
15. POMS-Negative Affect	ns	ns	ns	.49**	ns	ns	ns
16. POMS-Positive Affect	ns	ns	ns	ns	ns	ns	ns

* = <.05; ** = <.01; *** = <.001; ns = not significant

bold = significant after Bonferroni adjustment (<.002)

CHAPTER 4 - RESULTS SECTION 3

CONTROL COGNITIONS, JUST WORLD BELIEFS AND FEELINGS OF REVENGE: THEIR RELATION TO ATTRIBUTIONS OF BLAME, EMOTIONAL STATE, AND IMPACT OF EVENT

RESULTS

Control and Just World Cognitions

Means and standard deviations for feelings of past and future control and just world beliefs for the entire sample and demographic breakdowns are presented in Table 4-3.1. For the entire sample, mean levels of feelings of past and future control were low (1.62 and 1.41 on a 5-point scale, respectively). The mean total score JWS was 38.71, revealing low levels of belief in a just world.

Female subjects had higher mean levels of past control (1.65 for females; 1.57 for males), higher mean levels of future control (1.45 for females; 1.36 for males) and lower mean levels of just world beliefs (37.95 for females; 39.79 for males) than male subjects. T-tests revealed, nevertheless, that female and male subjects did not differ significantly on levels of past control [$t(32) = -.18$, $p = .86$], levels of future control [$t(32) = -.32$, $p = .75$]or just world beliefs [$t(32) = .53$, $p = .60$].

Support seeking subjects had higher mean levels than non-support seeking subjects on feelings of past control (2.00 vs. 1.38), feelings of future control (1.46 vs. 1.38), and just world beliefs (39.15 vs. 38.43). T-tests, however, revealed that support and non-support seeking subjects did not differ significantly on feelings of past control [$t(32) = -1.45$, $p = .16$], feelings of future control [$t(32) = -.27$, $p = .77$]or just world beliefs [$t(32) = -.20$, $p = .84$].

Subjects bereaved in 1975 had low mean levels of feelings of past control (2.00) and future control (2.33) and JWS total score of 41.67. Subjects bereaved in 1990 had low mean levels of feelings of past control (1.57) and future control (1.57). The mean JWS score was 38.43. Low mean levels of feelings of past control (2.50) and future control (1.50) were found in subjects bereaved in 1991 The JWS total score for this bereavement year was 27.50.

Table 4-3.1. Means and Standard Deviations of Past and Future Control Cognitions and Just World Beliefs in Entire Sample and By Gender, Support and Year

	Past Control	Future Control	Just World
Entire Sample (34)	1.62 (1.23)	1.41 (.82)	38.71 (9.90)
Gender			
Male (14)	1.57 (1.28)	1.36 (.84)	39.79 (9.13)
Female (20)	1.65 (1.23)	1.45 (.83)	37.95 (10.57)
Support			
Yes (13)	2.00 (1.63)	1.46 (.88)	39.15 (9.63)
No (21)	1.38 (.87)	1.38 (.81)	38.43 (10.29)
Year			
1975 (3)	2.00 (1.00)	2.33 (1.53)	41.67 (2.08)
1990 (7)	1.57 (1.51)	1.57 (1.13)	38.43 (10.03)
1991 (4)	2.50 (1.91)	1.50 (1.00)	27.50 (5.74)
1992 (2)	1.00 (--)	1.50 (.71)	32.50 (2.12)
1993 (13)	1.46 (1.13)	1.23 (.44)	40.23 (10.88)
1994 (5)	1.40 (.89)	1.00 (--)	44.80 (8.32)

For subjects bereaved in 1992, low mean levels of feelings of past control (1.00) and future control (1.50) were found. The JWS total score was 32.50. Low mean levels of feelings of past control (1.46) and future control (1.23) were found in subjects bereaved in 1993 . The JWS total score was 40.23 for this bereavement year. For subjects bereaved in 1994, low mean levels of feelings of past control (1.40) and future control (1.00) were found and in addition, this bereaved year had a JWS total score of 44.80.

One-way analysis of variance revealed, however, that year of bereavement did not have a significant main effect on mean levels of past control [$F(5,28) = .61$, $p = .70$], future control [$F(5,28) = 1.24$, $p = .31$] or just world beliefs [$F(5,28) = 1.91$, $p = .12$].

Differences in Emotional State and Event-Related Impact Between the Presence and Absence of Feelings of Revenge

Means and standard deviations of the sixteen measures of emotional state and impact of event for subjects with revenge and subjects without feelings of revenge are presented in Table 4-3.2. Subjects who had feelings of revenge scored significantly higher on six of the sixteen measures of emotional state and impact of event measures than subjects without feelings of revenge. Significant differences occurred on the GHQ-28 somatic symptoms sub-scale [$t(32)=2.02$, $p<.05$], the GHQ-28 anxiety/insomnia sub-scale [$t(32)=3.24$, $p<.01$], the GHQ-28 severe depression sub-scale [$t(32)=3.47$, $p<.01$], the GHQ-28 total score [$t(32)=2.59$, $p<.01$], the IES intrusion sub-scale [$t(32)=2.70$, $p<.01$], and the POMS-BI clearheaded/confused scale [$t(32)=-2.01$, $p<.05$]. No significant differences were found on the other ten measures (GHQ-28 social dysfunction sub-scale, the IES avoidance sub-scale, the IES total score, the POMS-BI negative affect, the POMS-BI positive affect, the POMS-BI composed/anxious scale, the POMS-BI agreeable/hostile scale, the POMS-BI elated/depressed scale, the POMS-BI confident/unsure scale, and the POMS-BI energetic/tired scale). Subjects with feelings of revenge showed effects such as depression, anxiety, insomnia, somatic symptoms and intrusive thoughts. Figure 4-3.1 shows the significant results for the revenge vs. no revenge comparison. Again, subjects with feelings of revenge scored in a more deleterious direction on all of the measures, significant or not.

Table 4-3.2 Means and Standard Deviations of the GHQ-28, the IES, and the POMS-BI For Subjects With Revenge Feelings and Subjects Without Revenge Feelings

	Revenge (n = 26)	No Revenge (n = 8)
(1) GHQ-28 somatic symptoms sub-scale	12.04 (4.65)	8.25 (4.62)
(2) GHQ-28 anxiety/insomnia sub-scale	14.04 (4.36)	8.13 (5.03)
(3) GHQ-28 social dysfunction sub-scale	12.58 (5.01)	11.00 (4.60)
(4) GHQ-28 severe depression sub-scale	11.08 (5.80)	5.13 (3.64)
(5) GHQ-28 total	49.73 (16.83)	32.50 (14.96)
(6) IES intrusion sub-scale	27.15 (8.05)	17.63 (10.82)
(7) IES avoidance sub-scale	19.69 (10.70)	14.25 (14.16)
(8) IES total	46.85 (17.11)	31.88 (23.63)
(9) POMS-BI negative affect	79.73 (18.84)	61.13 (33.09)
(10) POMS-BI positive affect	29.58 (15.30)	48.00 (30.69)
(11) POMS-BI composed/anxious scale	7.77 (6.84)	15.25 (11.12)
(12) POMS-BI agreeable/hostile scale	13.35 (5.97)	17.38 (6.93)
(13) POMS-BI elated/depressed scale	7.04 (5.47)	14.37 (12.05)
(14) POMS-BI confident/unsure scale	10.65 (7.44)	16.38 (11.24)
(15) POMS-BI energetic/tired scale	7.81 (6.03)	12.00 (8.75)
(16) POMS-BI clearheaded/confused scale	11.31 (8.08)	18.75 (12.28)

* On the POMS-BI scales, lower scores indicate the negative mood state. On the POMS-BI negative affect, higher scores indicate increased levels of negative mood, while on the POMS-BI positive affect, lower scores indicate decreased levels of positive mood.

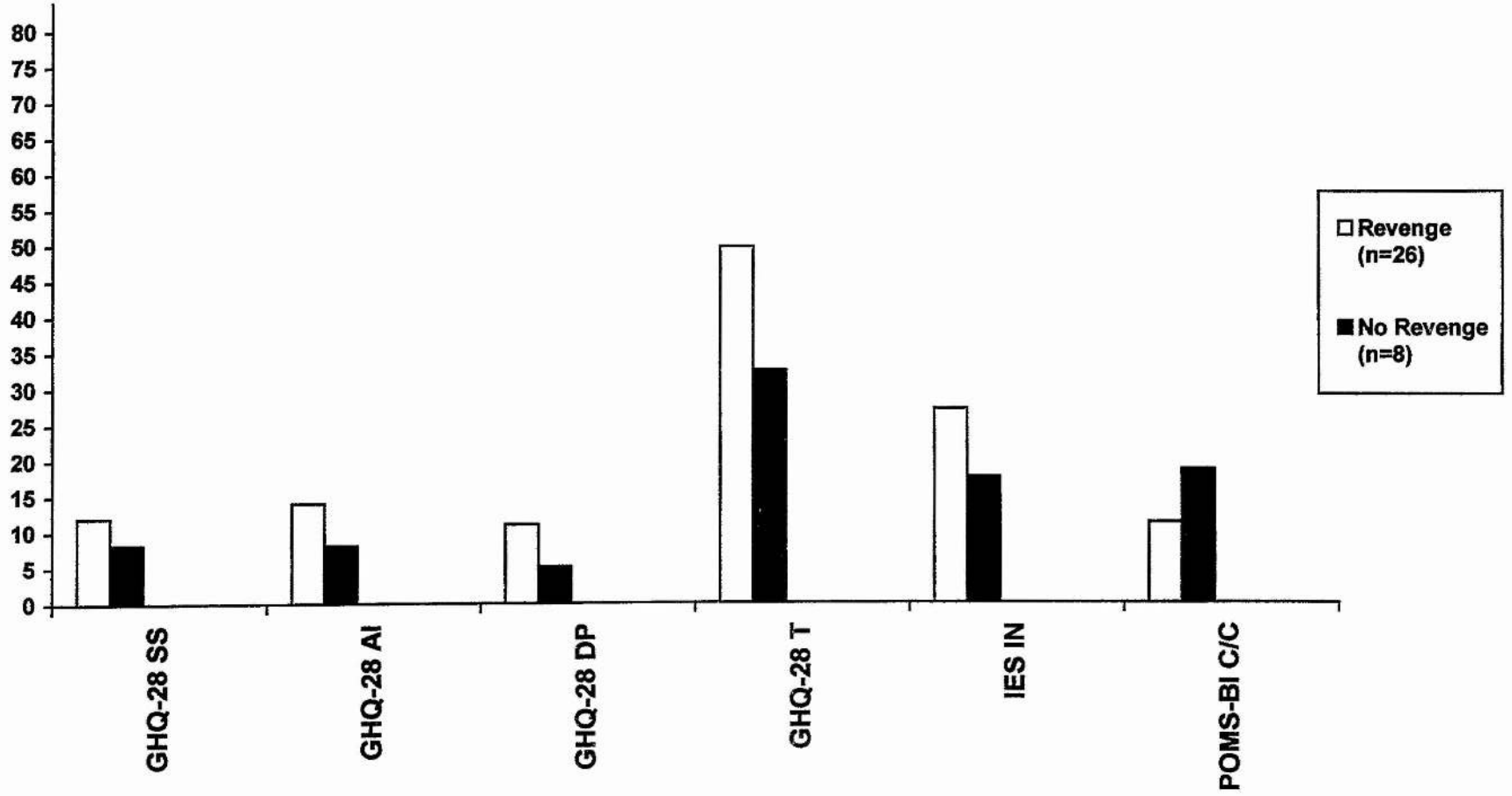


Figure 4-3.1. Significant Results for GHQ-28, IES, POMS-BI For Presence/Absence of Revenge (Revenge vs. No Revenge)

Differences in Blame Attributions Between the Presence and Absence of Feelings of Revenge

Means and standard deviations of the levels of blame attributions and the number of blame attributions made by subjects with feelings of revenge and subjects without feelings of revenge are presented in Table 4-3.3. No significant differences between subjects with feelings of revenge and subjects without feelings of revenge were found on the number of blame attributions made [$t(32) = .46$, $p = .65$], level of chance blame [$t(32) = .36$, $p = .72$], level of environmental blame [$t(32) = .50$, $p = .62$], level of other-blame [$t(32) = -.89$, $p = .38$], level of self-blame [$t(32) = -1.33$, $p = .21$], level of societal blame [$t(32) = -.29$, $p = .78$], and level of victim blame [$t(32) = -.55$, $p = .59$], which indicated that feelings of revenge did not increase the amount of blame that subjects were apportioning.

Table 4-3.3. Means and Standard Deviations of Levels of Blame Attributions and Number of Blame Attributions Made by Subjects With Feelings of Revenge and Subjects Without Feelings of Revenge

	Revenge (n = 26)	No Revenge (n = 8)
1. Number of Attributions Made	3.08 (.89)	3.25 (1.04)
2. Level of Chance Blame	2.92 (2.24)	3.25 (2.38)
3. Level of Environmental Blame	2.23 (1.90)	2.63 (2.07)
4. Level of Other-Blame	5.92 (.39)	5.75 (.71)
5. Level of Self-Blame	3.54 (2.45)	2.38 (2.07)
6. Level of Societal Blame	3.73 (2.29)	3.50 (1.85)
7. Level of Victim Blame	1.08 (.39)	1.00 (.00)

Associations and Relationships Between Demographic Characteristics, Cognitions and Revenge

To avoid Type I errors, Bonferroni adjustments were made due to the high number of variables in the correlations.

Correlations Between Control and Just World Cognitions and Feelings of Revenge

A correlation between levels of feelings of past control and levels of feelings of future control revealed that neither feeling of control was related to one another. The level of feelings of past control was not correlated with the level of feelings of future control. An additional correlation showed that levels of feelings of control (past or future) was not correlated with the level of just world beliefs held by subjects. In a separate correlation between feelings of revenge and control cognitions and just world beliefs, no significant relationships were found. Feelings of revenge were not associated with levels of past or future control or levels of just world beliefs.

Correlations Between Demographic Characteristics, Control Cognitions, Just World Beliefs and Feelings of Revenge

Correlations between demographic characteristics and feelings of past and future control revealed that neither gender nor support were related with past or future control. Age was negatively correlated with future control ($r=-.39$, $p=.02$), but this correlation was not significant after the Bonferroni adjustment ($p=.01$). Age, however, was not correlated with feelings of past control. Bereavement year was negatively correlated with future control ($r=-.38$, $p=.03$), which did not remain significant after the adjustment. Bereavement year was not correlated with feelings of past control.

The correlation between demographic characteristics and level of just world beliefs showed that no demographic variable (age, gender, support, or year) was related to levels of just world beliefs.

The correlations showed that feelings of revenge were not related to any of the demographic variables. Age ($r = .05$, $p = .80$), gender ($X^2(1) = .06$, $p = .81$), support ($X^2(1) = .78$, $p = .38$) or bereavement year ($r = .21$, $p = .23$) were not significantly associated or correlated with feelings of revenge.

Correlations Between Control and Just World Cognitions, Feelings of Revenge and Attributions of Blame

The correlation between the number of blame attributions made, levels of the six blame attributions and feelings of past and future control revealed no significant relationships. No correlations were found among the variables. In addition, the correlation between number of blame attributions made, levels of the six blame attributions and levels of just world beliefs showed only one significant correlation. Level of societal blame was negatively correlated with the Just World total score ($r=-.35$, $p<.04$), however, this correlation was not significant after the Bonferroni adjustment ($p<.01$). No other correlations were found between levels of blame attributions, number of attributions made and level of just world beliefs.

The correlation between the number of blame attributions made, levels of the six blame attributions and feelings of revenge revealed no significant relationships. No correlations were found among the variables.

Correlations Between Control and Just World Cognitions, Feelings of Revenge, Emotional State and Event-Related Impact

In a correlation between the levels of feelings of control (both past and future) and the sixteen measures of emotional state and impact of event, results showed that the level of feelings of past control were negatively correlated only with the POMS-BI confident/unsure scale ($r=-.35$, $p<.05$), which was not significant after the Bonferroni adjustment ($p<.003$). In addition, the levels of future control was negatively correlated with the GHQ-28 somatic symptoms sub-scale ($r=-.44$, $p<.01$) and positively correlated with the POMS-BI clearheaded/confused scale ($r=.37$, $p<.05$). Neither of these correlations remained significant after the Bonferroni adjustment. No other correlations were found.

Correlational analysis of level of just world beliefs and the sixteen measures of emotional state and impact of event revealed only two significant relationships. Level of just world beliefs was negatively correlated with the IES intrusion sub-scale ($r=-.39$, $p<.05$) and the IES total ($r=-.34$, $p<.05$). Lower levels of just world beliefs were related to higher levels of intrusive thoughts, while higher levels of just world beliefs were related to lower levels of intrusive thoughts. Neither correlation, however, remained significant after the Bonferroni adjustment ($p<.003$).

The presence or absence of feelings of revenge was positively correlated with the GHQ-28 somatic symptoms sub-scale ($r= .34$, $p<.05$), the GHQ-28 anxiety/insomnia sub-scale

(r= .50, p<.01), the GHQ-28 severe depression sub-scale (r= .43, p<.01), the GHQ-28 total score (r=.42, p<.01), the IES intrusion sub-scale (r= .43, p<.01), and the POMS-BI negative affect (r=.34, p<.05). Revenge was negatively correlated with the POMS-BI positive affect (r= -.38, p<.05), the POMS-BI composed/anxious scale (r= -.38, p<.05), the POMS-BI elated/depressed scale (r= -.39, p<.05), and the POMS-BI clearheaded/confused scale (r= -.33, p<.05). The results indicated that the presence of feelings of revenge was related to higher levels of anxiety/insomnia, somatic symptoms, depression, intrusive thoughts, confusion and negative affect and lower levels of positive affect. The only relationship which remained significant after the Bonferroni adjustment (p<.003), however, was that between the presence of revenge feelings and the GHQ-28 anxiety/insomnia sub-scale.

Predictive Relationships Among Demographic Characteristics, Self-Blame, Revenge and Emotional State and Impact of Event

In order to determine whether the level of self-blame attributions or the presence of revenge predicted emotional state and impact of event, a number of step-wise multiple regressions were carried out. The step-wise approach was chosen since it is commonly used when there are no preconceived notions as to the relevant order of the independent variables in the equation. Due to the findings of the previous two results sections (4-1 and 4-2 which showed that the demographic variables were related to blame and measures of emotional state and impact of event), age, gender, support and bereavement year were also used as independent variables along with blame and revenge. The addition of the demographic variables made the variable/subject ratio 6.8:1.

Four individual step-wise multiple regressions were carried out using age, gender, support, bereavement year, level of self-blame and revenge as the independent variables and the GHQ-28 total score, the IES total score and the POMS-BI positive and negative affect totals as the dependent variables in turn. Table 4-3.4 report the significant and non-significant results for each of the four step-wise regressions.

The step-wise regression with the GHQ-28 total score as the dependent variable showed that age of subject (beta = .46, t = 3.86, p<.001), level of self-blame (beta = .41, t = 3.35, p<.01) and revenge (beta = .31, t = 2.58, p<.05) were significant predictors of emotional state. The older the subject, high levels of self-blame, and feelings of revenge predicted higher levels of negative effects on emotional state. Gender, support and year of bereavement were not significant predictors.

The step-wise regression with the IES total score as the dependent variable showed that age (beta = .26, t = 2.10, p<.05), support (beta = .28, t = 2.14, p<.05) and level of self-blame (beta = .51, t = 3.92, p<.001) were significant predictors of intrusive thoughts and avoidance behaviours. The older the subject, seeking support and high levels of self-blame predicted high levels of intrusion and avoidance. Gender, year of bereavement and revenge were not significant predictors.

The step-wise regression with the POMS-BI positive affect as the dependent variable showed that year of bereavement (beta = -.41, t = -2.54, p<.05) was a significant predictor of positive affect. Being bereaved more recently predicted lower levels of positive affect. Age, gender, support, level of self-blame and revenge were not significant predictors.

The step-wise regression with the POMS-BI negative affect as the dependent variable showed that age (beta = .35, t = 2.66, p<.01), gender (beta = .51, t = 3.93, p<.001) and revenge (beta = .34, t = 2.64, p<.01) were significant predictors of negative affect. The older the subject, being female, and feelings of revenge predicted high levels of negative affect. Support, bereavement year and level of self-blame were not significant predictors.

Table 4-3.3. Results for the Four Step-Wise Multiple Regressions With Demographic Characteristics, Level of Self-Blame and Revenge as Predictors of the GHQ-28 total, the IES total, and the POMS-BI positive and negative affect

Dependent Variable	Independent Variable(s)	Beta	Adjusted R^2	Sig. of T
GHQ-28 Total	Self-Blame	.41	.54	.01
	Revenge	.31		.05
	Age	.46		.001
	Gender			ns
	Support			ns
	Year			ns
[F(3,30) = 13.98, p < .0000]				
IES Total	Self-Blame	.51	.47	.001
	Age	.26		.05
	Support	.28		.05
	Revenge			ns
	Gender			ns
	Year			ns
[F(3,30) = 10.58, p < .0001]				
POMS-BI Positive Affect	Year	-.41	.14	.05
	Age			ns
	Gender			ns
	Support			ns
	Self-Blame			ns
	Revenge			ns
[F(1,32) = 6.46, p < .05]				
POMS-BI Negative Affect	Age	.35	.44	.01
	Gender	.51		.001
	Revenge	.34		.01
	Support			ns
	Year			ns
	Self-Blame			ns
[F(3,30) = 9.79, p < = .0001]				

CHAPTER 4

DISCUSSION OF RESULTS SECTIONS 1 - 3

This section is a discussion of the results obtained from sections 1 - 3. The findings from each results section are discussed with their relation to previous relevant literature. Following the findings are the methodological limitations and strengths of the current study.

EMOTIONAL STATE & EVENT-RELATED IMPACT

The results from the analyses found that the subject sample was experiencing high levels of negative emotions and negative event-related impact as evidenced by their scores on all three standardised measures. Scores from the GHQ-28 showed that the majority of subjects were above the established thresholds for "caseness" on somatic symptoms, anxiety/insomnia and social dysfunction which indicated a negative impact on emotional state. Subjects from this sample scored in a manner comparable to those from the two other homicide relative studies discussed in relation to the IES (Amick-McMullan et al., 1988; Rynearson & McCreery, 1993). These results suggested that the current sample of secondary victims were similar to secondary victims from the U.S.A. in their intrusive thoughts and avoidance behaviours. This finding could be seen as a validation of the representativeness of the subject sample. Further, subjects from this sample scored higher on intrusive thoughts and avoidance behaviours than the "normals" from the IES study (Horowitz et al., 1977). The sample of secondary victims in this study exhibited high levels of intrusive thoughts and moderately high levels of avoidance behaviours related to the murder of their family member. In addition, the sample has increased negative affect and decreased positive affect in comparison with the "normals" from the Lorr & Wunderlich study in 1988 as evidenced by their score on the Profile of Mood States Bi-Polar form. These results suggest that bereavement through murder negatively impacted the lives of these subjects and appeared to be similar to findings from other studies. In a study comparing the bereavement of spouses, parents of children and adult children who had lost an older parent, Sanders (1980) found that parents who had lost children experienced more intensive grief symptoms than the other two

groups. These parents showed higher levels of somatic reactions, and more depression, anger and guilt than participants who had lost a spouse or parents.

In order to determine whether additional variables influenced psychological state, subject and crime characteristics were examined in relation to emotional state and event-related impact.

Age of subject was correlated with social dysfunction and somatic symptoms. Higher levels of social dysfunction and somatic symptoms were related to age of subject. Older subjects experienced more social dysfunction and somatic symptoms than younger subjects.

Gender differences emerged in the results. Female subjects scored in a more negative direction on all of the measures of emotional state and event-related impact, whether significant or not. Female subjects were significantly more depressed and anxious; had higher levels of somatic symptoms, social dysfunction and avoidance behaviours; and had lower positive affect than male subjects. This finding may be due to the fact that most of the female subjects were the mothers of the victims, and mothers have been shown in bereavement research (Reed, 1993; Fish, 1986; Littlefield & Rushton, 1986) to exhibit higher levels of distress than fathers.

Differences appeared between support seeking subjects and non-support seeking subjects. Support seeking subjects reported more negative emotional state, intrusive thoughts, avoidance behaviours and depression than non-support seeking subjects. It could be that secondary victims who were experiencing intense feelings distress sought support as a way of ameliorating their suffering. These subjects may also have had their distress increased as a result of support by way of re-living the trauma related to the murder through the disclosure of their feelings to other support group members. It is not thought, however, that the support itself was the initial impetus for the high levels of distress due to the fact that support seeking subjects and non-support seeking subjects were not significantly different from one another on many of the measures of emotional state and event-related impact (e.g., negative affect, somatic symptoms, severe depression).

Subjects bereaved in differing years appeared to show few differences between one another. The only significant difference that emerged was between subjects bereaved in 1994 and subjects bereaved in 1975, in that the subjects from 1994 had a lower positive affect. No other significant differences arose. This may suggest that the negative affect does not improve over time, but positive affect does.

ATTRIBUTIONS

In terms of the number of blame attributions that these secondary victims made for the murder of their family member, it became apparent that their attributional searching was complex. The subjects reported a minimum of two and a maximum of five blame attributions. These results indicated that subjects were trying to make sense of their family member's murder by laying blame in many places, in particular at themselves, the perpetrator, society and chance. This may have resulted as a way of trying to view the murder as something other than a random act of violence.

Male and female subjects did not differ in the number of blame attributions made for the murder happening. Female subjects, however, had higher levels of blame on all six of the blame attributions than did male subjects. Level of self-blame, however, was the only blame attribution which was significantly different between genders. Female subjects had significantly higher levels of self-blame than male subjects. This could have resulted due to most of the female subjects being the mothers of the victims.

Support seeking subjects had higher levels of self-blame, societal blame and victim blame than non-support seeking subjects, while having lower levels of chance blame, environmental blame and other-blame than non-support seekers. Analyses revealed, however, that support and non-support seekers did not differ significantly from one another on levels of blame on the six blame attributions.

Due to the non-significant findings on levels of blame by bereavement year, it appeared that level of blame was not affected by time since the murder occurred. People more recently bereaved did not have higher levels of blame than those bereaved years ago. This finding may suggest that level of blame does not wane over the years and that when people are faced with the murder of their relative, they continue to hold on to their initial blame attributions.

Results indicated that the number of blame attributions did not affect levels of emotional state and event-related impact. Making more attributions of blame was not correlated with higher levels of negative emotional state or event-related impact or vice versa. This finding suggests that blaming more factors does not increase distress and that higher levels of distress does not increase attributional searching; it is not additive.

Results revealed that subject and crime characteristics (age, gender, support and year) were not related with the level of any of the six blame attributions. None of the characteristics were found to be related with low or high levels of blame.

Further, results indicated that differing levels of chance blame, environmental blame and other-blame were not related to emotional state or event-related impact or vice versa. Differing levels of societal blame and self-blame were, however, related to emotional state and event-related impact and vice versa. High levels of societal blame were related to increased levels of somatic symptoms, anxiety/insomnia and social dysfunction. High levels of self-blame were related to increased levels of somatic symptoms, severe depression, intrusive thoughts and avoidance behaviours.

In terms of blame, it appeared from the analyses that self-blame was the most important blame attribution that secondary victims made. Even when a large number of blame attributions were made, if self-blame was involved, it was related to the most significant increase in negative emotional state and event-related impact. This finding is contradictory to the findings of Janoff-Bulman (1979) and Tennen & Affleck (1990) which showed that self-blame was related to a more positive adjustment outcome than other-blame. Further, Janoff-Bulman stated that behavioural self-blame (blaming one's actions/behaviours for the negative event) was responsible for the beneficial aspect of self-blame, by allowing people to feel that they have increased control over the occurrence of future negative events because they could change the behaviour which they felt was responsible for the occurrence of the past negative event. All eighteen subjects in this study who blamed themselves engaged in behavioural self-blame. Behavioural self-blame was not related to better adjustment outcome in this study as self-blame was related to an increased negative emotional state and event-related impact. The finding was consistent, however, with the findings of Weinberg (1994), Frazier (1990) and Frazier & Schauben (1994) in that self-blame was related to poor adjustment to bereavement.

CONTROL COGNITIONS, JUST WORLD BELIEFS & FEELINGS OF REVENGE

Results from section 3 were concerned with the additional, possibly relevant, variables of past and future control cognitions, just world beliefs and feelings of revenge. Analyses examined the relationships between these variables, between these variables and subject/crime characteristics, between these variables and attributions of blame and these variables and

emotional state and event-related impact. In addition, regression analyses were performed with significant variables from sections 1 - 3 in order to determine which of these variables were predictive of emotional state and event-related impact.

Results indicated that past and future control cognitions, just world beliefs and feelings of revenge were not related to one another. Analyses also revealed that past and future control cognitions, just world beliefs and feelings of revenge were not related to subject and crime characteristics (age, gender, support and year). Further, no significant differences emerged between female and male subjects on levels of past and future control, levels of just world beliefs or on the presence/absence of revenge feelings. No significant differences were revealed between support and non-support seeking subjects on levels of past and future control, levels of just world beliefs or on the presence/absence of feelings of revenge. In addition, no significant differences arose between subjects bereaved in differing years on these variables.

Control cognitions, just world beliefs and feelings of revenge were not related to the number of blame attributions made or the levels of the six blame attributions or vice versa in this subject sample of secondary victims.

Subjects who experienced feelings of revenge had more negative emotional state and event-related impact than subjects who did not experience feelings of revenge. Subjects with feelings of revenge had higher levels of somatic symptoms, anxiety/insomnia, depression, intrusive thoughts and avoidance behaviours. Revenge was also related to high levels of anxiety/insomnia and vice versa. These findings were consistent with the findings of Weinberg (1994) which showed that feelings of revenge were related to negative bereavement outcome, due to feelings of revenge not being seen as socially acceptable feelings. Drenovsky (1994) suggested that being obsessed with retribution may indeed interfere with the adjustment process and healing.

Past and future control cognitions and just world beliefs were not related to emotional state and event-related impact or vice versa. This finding was inconsistent with the finding of Janoff-Bulman (1979, 1982) that control cognitions would decrease levels of depression and distress. It appeared that feelings of past and future control and just world beliefs were not an important feature in the bereavement outcome for secondary victims of murder. It could be that since the actual crime was not perpetrated against the family member and they were not

directly involved in the crime, the need for control over the past event and the recurrence of future events is not a salient cognition

Multiple regression analyses revealed predictive relationships between level of self-blame, presence of revenge and emotional state and event-related impact. In addition, however, it appeared that the subjects/crime characteristics (age, gender, support and bereavement year) were predictive of emotional state and event-related impact. These variables may work in conjunction with self-blame and revenge to produce a more negative impact on secondary victims of murder. High levels of self-blame was predictive of negative emotional state and event-related impact. Feelings of revenge predicted negative emotional state and an increased negative affect. Being older predicted negative emotional state and event-related impact and an increased negative affect. Being female was predictive of increased negative affect, in terms of increased anxiety, hostility, depression, unsure feelings and confusion as opposed to being male. Support seeking was predictive of increased intrusive thoughts and avoidance behaviours. Bereavement year was predictive of positive affect. Being more recently bereaved predicted lower levels of positive affect.

METHODOLOGICAL LIMITATIONS & STRENGTHS

A number of methodological limitations arose. First, the subjects were derived from a self-selected group of individuals bereaved through a common cause. In addition, there were no baseline measures of pre-bereavement functioning with which to compare post-bereavement measures. Considering this point, it cannot be said definitively that the poor bereavement adjustment was related only to the crime. These two issues (self-selection and the lack of baseline measures), however, can prove difficult to overcome when conducting bereavement research. A second limitation of the study concerned the distribution of the number of subjects per each murder. As there were thirty-four subjects and only sixteen individual murders, there was considerable overlap in the number of subjects to each murder. Family members might be more similar to one another, as well as their responses being similar due to the shared experience and communication between them, than to non-related subjects. This could prove to be a confounding variable in the study. This limitation, however, again is difficult to overcome in such research. A third limitation of the study was that the subjects were entirely from Glasgow, Scotland. It could be that coming from a particular area of the

country play a part in determining bereavement issues and behaviour, which in turn, could lead to differing adjustment outcomes. This limitation needs to be addressed in future secondary victim of murder research by soliciting subjects from wider areas of the country.

While the present findings have certain limitations to their generalisability, the study did have several strengths. First, the sample for this study may appear modest, however, it was relatively large in comparison to other published studies in the field. Prior empirical research from the U. S. A. with secondary victims of murder have had sample sizes of eighteen and nineteen (Rynearson & McCreery, 1993; Amick-McMullan et al., 1989, respectively). Second, this study was empirically-based and it used standardised measures (GHQ-28, IES, & POMS-BI) in order to assess emotional state and event-related impact rather than unstandardised observations solely. In addition, the subjects were both support and non-support seeking which allowed comparison to be made. Prior research has used either entirely support seeking subjects or entirely non-support seeking subjects. Third, the results from this study possessed strong predictive power. By determining the kinds of attributions secondary victims of murder make and whether or not they are experiencing emotional distress or feelings of revenge, it may be possible to identify those individuals who are most at risk for adjustment outcome difficulties.

CHAPTER 4 - RESULTS SECTION 4

QUALITATIVE ASPECT OF EMPIRICAL FINDINGS

INTRODUCTION

The purpose of this results section was to use qualitative data gathered during the interviews to elaborate on the empirical findings of results sections 1-3. This section was not designed to uncover any negative emotional state or event-related impact not identified in the quantitative data or to be an in-depth qualitative analysis. Instead, this section is intended to illustrate the quantitative findings. The aim was to use subject narratives to open interview questions to account for the emotional state and impact of event experienced by the family members bereaved through murder.

METHOD

Interview questions reported were the ones that addressed the topics of attributional searching, blame attributions, revenge, controllability of the event, world views, and emotional state and mood which were analysed in results sections 1-3. The following specific interview questions were selected:

Question 20 - *At the time of the murder, who did you blame?*

Question 21 - *At the time of the murder, what caused you to blame the victim, self, and/or other?*

Question 24 - *To what extent do you feel the murder was caused by something you could have controlled on a scale from 1-5, with 1 as completely uncontrollable and 5 as completely controllable?*

Question 25 - *What do you feel was uncontrollable or controllable?*

Question 31 - *What emotions are you still experiencing?*

Question 32 - *How often do you experience these emotions?*

Question 35 - *When and why did you decided/not decide to come to FOMC for support?*

Question 37 - *Give a brief description of how the murder has affected your life?*

Question 39 - *Do you feel differently about yourself now?*

Question 40 - *Have your views about the world changed?*

Question 48 - *Have you ever experienced feelings of revenge? Are you still experiencing feelings of revenge now?*

Question 62 - *Do you feel that you are or will be able to reconstruct you life to be meaningful again?*

Question 65 - *Considering everything which has happened to you since the murder occurred, what do you think has been the most* upsetting aspect?

RESULTS

Emotional State and Impact of Event

Findings from results section 1 revealed that this subject sample of secondary victims of murder were experiencing high levels of negative emotions and an intense level of impact of the event. Table 4-4.1 shows subject responses to Question 31 and Question 32 which were interested in what emotions and the frequency of those emotions the subjects were still experiencing. The subject responses to these open questions revealed results completely in line with the results of the closed questions in the standardised measures. A wide range of negative emotions was reported with "anger" being the commonest (see Figure 4-4.1).

When subjects were questioned about how the murder affected their lives, many of them answered that their lives were "ruined", would never be the same and that they would never be the same. Table 4-4.2 gives a full and detailed account of subject responses to this question. These personal responses may account for the high levels of negative emotional state and event-related impact found in results section 1.

Table 4-4.1. Responses to Question 31 - What emotions are you still experiencing? and Question 32 - How often do you experience these emotions?"

SUBJECT INFO.	SUBJECT ANSWER TO Q31	SUBJECT ANSWER to Q32
1. Father 1993 Son shot execution style	angry, sad, depressed, helpless, isolated	every day
2. Mother 1993 Son shot execution style	angry, grief, frustrated, terrible emptiness	every day
5. Granddaughter 1991 Grandmother sexually assaulted and beaten	angry, depressed, bitter, suicidal	several times per week
7. Wife 1994 Husband beaten stabbed	angry, bitter, rage, very distressed	always
8. Mother 1994 Son beaten and stabbed	sad, worried, hatred	every day

Table 4-4.1. Responses to Question 31 - What emotions are you still experiencing? and Question 32 - How often do you experience these emotions?"

11. Father 1994 Son beaten and stabbed	**angry, sad, depressed, bitter, isolated, rage, vengeful**	**quite a lot, not every day**
16. Sister 1993 Brother stabbed	**angry, sad, sorrow, depressed, bitter, isolated, rage, frustrated, hatred, cheated**	**daily**
20. Father 1975 Daughter beaten and thrown from high rise building	**angry, sad, sorrow, vengeful, loss**	**pretty constant feeling**
21. Brother 1975 Sister beaten and thrown from high rise building	**angry, out of control, bitter, tortured**	**they come and go**
22. Mother 1975 Daughter beaten and thrown from high rise building	**angry, confused, guilty, sad, depressed, helpless, bitter, vulnerable**	**constantly**

Table 4-4.1. Responses to Question 31 - What emotions are you still experiencing? and Question 32 - How often do you experience these emotions?"

30. Sister 1993 Brother shot	**angry, scared, fearful, hate**	**every day**
36. Mother 1992 Son stabbed	**guilty, sad, lost, destroyed**	**daily**
38. Father 1992 Son stabbed	**angry, guilty, hate, weepy, uneasy, short tempered**	**several times per week**
39. Mother 1993 Son shot	**angry, depressed, rage, hate, cheated**	**two times per week**
41. Father-in-law 1994 Son-in-law beaten and stabbed	**angry, sad, sorrow**	**every day**
42. Mother-in-law 1994 Son-in-law beaten and stabbed	**angry, guilty, sad, helpless, shocked, crying/weepy**	**every day**
44. Daughter 1990 Father stabbed	**angry, sad, depressed, bitter**	**daily**
45. Daughter 1990 Father stabbed	**angry, sad, depressed, vengeful**	**every day**

Table 4-4.1. Responses to Question 31 - What emotions are you still experiencing? and Question 32 - How often do you experience these emotions?"

48. Son 1990 Father stabbed	**angry, sad, depressed, out of control, bitter, isolated, rage, shocked, vengeful, never get over**	**daily**
49. Sister 1991 Brother stabbed	**angry, sorrow, bitter, rage, vengeful, hate, unconfident, missing/loss**	**every day**
51. Sister 1993 Brother beaten and stabbed	**sad, fearful, isolated, vengeful, vulnerable, hatred, trapped, frustrated, suffering**	**daily**
52. Mother 1993 Daughter strangled	**angry, worried, depressed, scared, panicky, on edge**	**daily**
53. Father 1993 Daughter strangled	**angry, sad, shocked, vengeful, jealousy, loss**	**daily**
54. Brother 1993 Sister strangled	**angry, sad, missing,**	**two to three times per week**
58. Mother 1990 Daughter stabbed	**sorrow, fearful, weepy, terrified all the time**	**all the time**
59. Brother 1990 Sister stabbed	**angry, annoyed, sad, bitter**	**it comes and goes**

Table 4-4.1. Responses to Question 31 - What emotions are you still experiencing? and Question 32 - How often do you experience these emotions?"

66. Stepfather 1993 Stepson beaten and drowned	**sadness, cheated**	**weekly**
67. Mother 1993 Son beaten and drowned	**angry, sad, helpless, bitter, lost**	**daily**
70. Father 1991 Daughter stabbed	**angry, hatred, suicidal**	**always**
71. Mother 1991 Daughter stabbed	**angry, sad, hatred, weepy**	**daily**
74. Father 1993 Son stabbed	**sad, scared, bitter, fearful, isolated, vulnerable, terrible, suspicious**	**daily**
75. Mother 1993 Son stabbed	**angry, numb, fearful, frightened, killing me**	**daily**
77. Mother 1990 Son beaten	**angry, depressed, bad temper, reclusive**	**three times per week**
78. Father 1990 Son beaten	**angry, sad, bitter, mixed emotions still**	**daily**

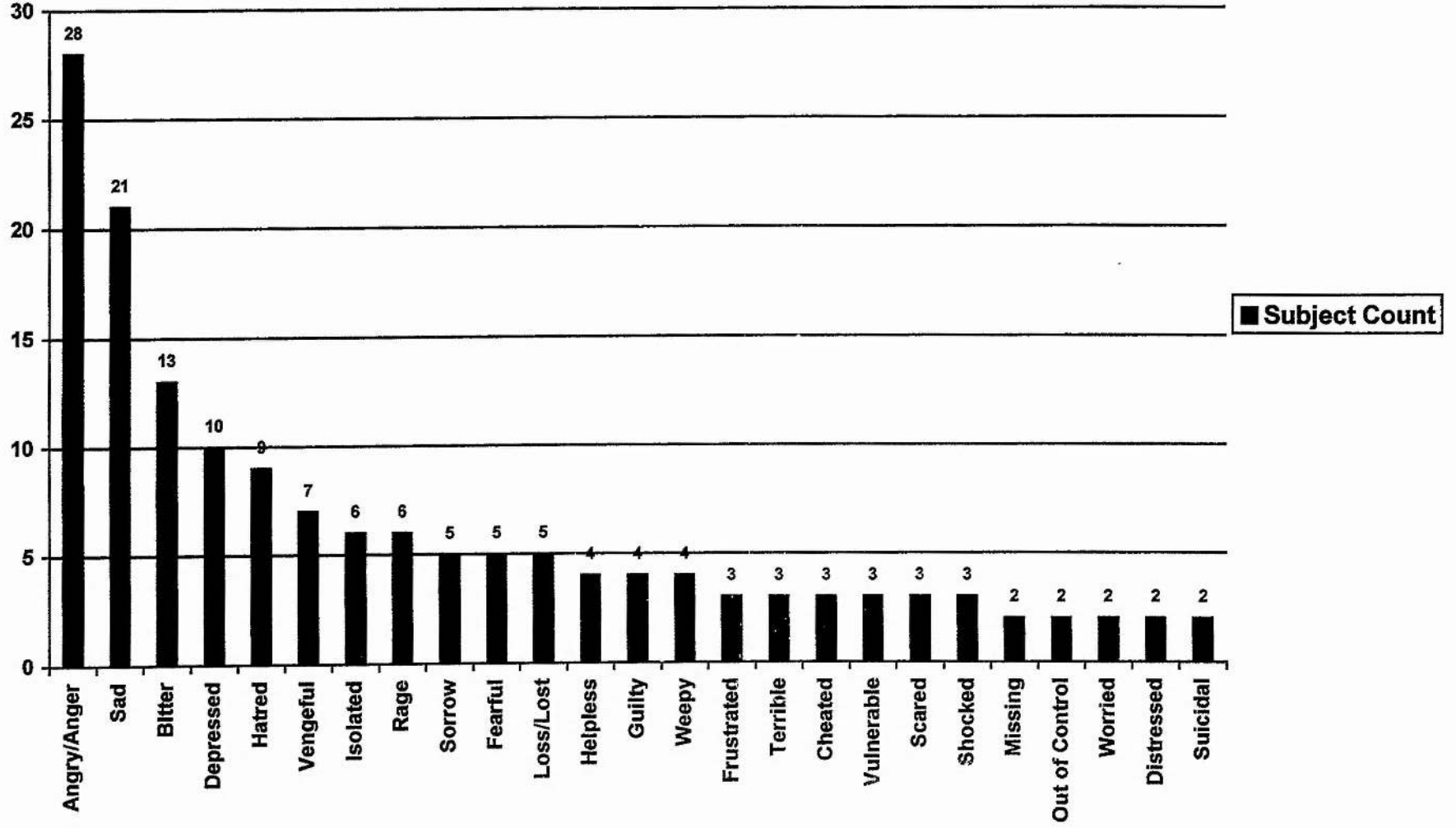


Figure 4-4.1. Subject Count for Feelings/Emotions Still Experienced at Time of Interview

Table 4-4.2. Responses to Question 37 - "Can you give a brief description of how the murder has affected your life?"

SUBJECT INFO.	SUBJECT ANSWER
1. Father 1993 Son shot execution style	"I've been more laid back day to day, you know and I'm more hard as a person I think, more ill-natured, more short tempered maybe, yeah."
2. Mother 1993 Son shot execution style	"It's totally changed our lives, our attitude, our relationship with one another."
5. Granddaughter 1991 Grandmother sexually assaulted and beaten	"It's affected it enormously. I'll never be the same person. I don't think I'll ever get rid of it because no one's been captured. Until it's solved, my mind will never stop wondering and I become preoccupied with the whole thing."
7. Wife 1994 Husband beaten stabbed	"It's just absolutely ruined it. I mean, I have not 'get up and go' any longer, or there's nothing that I look forward to now. It's just ruined."
8. Mother 1994 Son beaten and stabbed	"Wrecked it. You can sit in the house for days with your husband and not talk. I just sit and cry. I'd actually say I don't have a life now."

Table 4-4.2. Responses to Question 37 - "Can you give a brief description of how the murder has affected your life?"

11. Father 1994 Son beaten and stabbed	**"It's ruined my life."**
16. Sister 1993 Brother stabbed	**"It destroyed it."**
20. Father 1975 Daughter beaten and thrown from high rise building	**"The thing that I'm aware of the most is that it's not just affected, I know you're asking me specifically, it's not just affected my life, it's affected our whole family, our immediate family and our other family members. It almost caused us to split up, it's made me a different person."**
21. Brother 1975 Sister beaten and thrown from high rise building	**"It's ripped it apart; totally ripped it apart. It's a life that's been galvanised by that particular experience."**
22. Mother 1975 Daughter beaten and thrown from high rise building	**"It affected our life because it's made us very sad people, made us very angry people at times, blaming each other as well, we are not normal people any longer."**

Table 4-4.2. Responses to Question 37 - "Can you give a brief description of how the murder has affected your life?"

30. Sister 1993 Brother shot	**"Totally devastated. I'm always thinking 'what if this happens, what if that happens'. It's totally changed my life."**
36. Mother 1992 Son stabbed	**"It destroyed it."**
38. Father 1992 Son stabbed	**"Cheated, I would swap places with "___" (son's name)."**
39. Mother 1993 Son shot	**"Just devastated me."**
41. Father-in-law 1994 Son-in-law beaten and stabbed	**"Well, it's certainly changed it and just the way it's given me a lot more sadness than I ever thought I would have had, you know. My life was just pretty steady and happy and I'm not so happy now, you know."**
42. Mother-in-law 1994 Son-in-law beaten and stabbed	**"As I say, it's drastically changed all our lives. It just makes you, just makes you wonder what it's all about. I would never have believed a death could have caused this. I mean it wasn't a death, it was a murder. I wouldn't have believed that people could change the way, the way that I could feel could change.**
44. Daughter 1990 Father stabbed	**"It's made me a lot wiser to the outside world. I've had to do things myself. It makes you appreciate people can be here today and gone tomorrow."**
45. Daughter 1990 Father stabbed	**"It's really affected my life, it's altered everything in my life, it's destroyed my family, I sometimes feel like I'm two people."**

Table 4-4.2. Responses to Question 37 - "Can you give a brief description of how the murder has affected your life?"

48. Son 1990 Father stabbed	**"It changes your whole life, I used to feel my life was over."**
49. Sister 1991 Brother stabbed	**"It changed me something terrible, it's unreal, your attitude, your manner."**
51. Sister 1993 Brother beaten and stabbed	**"My life ended the day he died, my heart stopped, the day he died I died, a sort of part of me died."**
52. Mother 1993 Daughter strangled	**"I don't have a life anymore, it ended, it just stopped, you go through the motions, but have no life."**
53. Father 1993 Daughter strangled	**"Well, it's turned it upside down, it's not the same as it was and it will never be the same again. I just feel different from anyone else, a black shadow, black cloud constantly following me about everywhere."**
54. Brother 1993 Sister strangled	**"It affected it obviously greatly because I haven't got a sister anymore and I did have a sister and I haven't got the same parents that I had and I'm not the same myself, and I'll never be the same."**
58. Mother 1990 Daughter stabbed	**"My life is ka-put, it's finished it, as far as I'm concerned."**
59. Brother 1990 Sister stabbed	**"It's put a permanent mark, stain on my life and it's hard to describe what effect is has on me. It's just a permanent reminder, every part of your life and every day you're reminded of it."**

Table 4-4.2. Responses to Question 37 - "Can you give a brief description of how the murder has affected your life?"

66. Stepfather 1993 Stepson beaten and drowned	**"It'll never be the same as it was. "___" (wife's name) will never be the same person she was."**
67. Mother 1993 Son beaten and drowned	**"It's changed my life, it's changed all our lives. I tend now not to take things too lightly. I don't get frivolous very often and I don't feel that way."**
70. Father 1991 Daughter stabbed	**"It's destroyed it, there's no family left you know. There's no purpose in going on anymore."**
71. Mother 1991 Daughter stabbed	**"I can't get over this, there isn't any peace of mind."**
74. Father 1993 Son stabbed	**"There's a void in my life, a big void."**
75. Mother 1993 Son stabbed	**"Terrible, it's just changed my life completely, changed our whole family's life."**
77. Mother 1990 Son beaten	**"I don't think I'll ever be the same again. It's changed us all."**
78. Father 1990 Son beaten	**"Emotionally, I'm wrecked."**

In an attempt to determine whether subjects would be able to assimilate the event into their lives, subjects were asked whether they had or would be able to reconstruct their lives to be meaningful again (question 62). Subject responses were almost evenly split between answers of 'yes' and 'no'. Fourteen subjects answered "yes", seventeen subjects answered "no" and three subjects answered "don't know". Table 4-4.3 gives a detailed account of subject responses. These responses may account for the findings in results section 1 in which subjects had high scores on the measures of emotional state and impact of event. Subjects who answered "no" had higher levels of negative emotional state, higher levels of negative affect and higher levels of event related impact than subjects who answered "yes".

Subject were asked in question 65 to describe the most upsetting aspect of the event. Subject responses to this question can be found in Table 4-4.4. As most of the responses dealt with the loss of their relative and how their relative was brutally murdered, this may be a factor which contributed to the high levels of negative emotional state and event-related impact that subjects exhibited on the psychological measures.

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

SUBJECT INFO.	SUBJECT ANSWER
1. Father 1993 Son shot execution style	No: "Never, no, cause there's something missing that should be there."
2. Mother 1993 Son shot execution style	Yes: "I don't think I'll ever be the same again, I think we have to try to look forward and get on with some sort of life because I don't think you could live like this indefinitely with this strain. Yes, I feel we have to look forward and make a conscious effort to pick up the threads of what was a normal life to us."
5. Granddaughter 1991 Grandmother sexually assaulted and beaten	I don't know: "Well, I don't know, the only thing meaningful in the future to me is obviously my child and if I'm wanting anything for myself. The only meaning in my life now is to try and if I get one person to understand what in the hell is going on out there that would mean a lot to me."
7. Wife 1994 Husband beaten stabbed	No: "Well the way I feel just now, no. But I would like to think I could, but I don't think so. There's just no meaning left. I just fell that a whole part of me has been taken away, and that's just really all."
8. Mother 1994 Son beaten and stabbed	No: "I don't see any purpose in my life now."

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

11. Father 1994 Son beaten and stabbed	**No: "No, never, well, when my son went, part of me went, no doubt about that."**
16. Sister 1993 Brother stabbed	**I don't know: "I don't know, I just don't know."**
20. Father 1975 Daughter beaten and thrown from high rise building	**Yes: "I feel my life is meaningful and I've always felt that despite "___" (daughter's name) being murdered."**
21. Brother 1975 Sister beaten and thrown from high rise building	**Yes: "My life is very meaningful to me, it's just as I say, I've got a very, very clear cut picture of the world and where I fit in in relation to it. It's just that my life is forged, and I'm in constant mental agony but my life exists, my life is very solid."**
22. Mother 1975 Daughter beaten and thrown from high rise building	**No: "Not without "___" (daughter's name). Without her, no, it can't be complete."**

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

30. Sister 1993 Brother shot	**I don't know: "Hopefully I will, hopefully; it just hoping that my brother will be proud of me getting on."**
36. Mother 1992 Son stabbed	**No: "No, never, not without "___" (son's name)."**
38. Father 1992 Son stabbed	**Yes: "I hope so, I hope I do more good than bad."**
39. Mother 1993 Son shot	**No: "No, I don't think society will let me. He died and still nobody's been caught and I'll never get it out of my head that nobody's been caught."**
41. Father-in-law 1994 Son-in-law beaten and stabbed	**Yes: "Well, yes, yes, I would say so, yeah. As they say, 'time's a great healer', you know, but it certainly is, there's no doubt about that, it's the only thing you've got yourself, you know."**
42. Mother-in-law 1994 Son-in-law beaten and stabbed	**Yes: "I would like to think so, I would like to think that this wouldn't go on forever. They say time's a great healer, so kinda looking forward to that."**
44. Daughter 1990 Father stabbed	**Yes: "Well, it's getting easier now. I think about it all the time, it just means coping around it. I don't have as much depression now as I used to have so I'd say it's getting a bit better."**
45. Daughter 1990 Father stabbed	**No: "I think it's meaningful doing this group (FOMC), but for my personal life, I would find that very difficult."**

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

48. Son 1990 Father stabbed	**Yes: "I think I will, I've picked myself up and I've got to get on with my life."**
49. Sister 1991 Brother stabbed	**No: "I'll never be back to the way that I was, there's too much hate in me, unless the hate goes away and you just put it to the back of your mind as if it never happened - but how could you do that?"**
51. Sister 1993 Brother beaten and stabbed	**No: "No, never, not as long as I live, as long as I've got breath in my body, I'll never be the old "___" (own name). He's never gonna come back."**
52. Mother 1993 Daughter strangled	**No: "No, there just isn't anything, we were getting to the stage in our lives where we were all making plans, the kids were growing up. I just got a house, "___" (daughter's name) and I were gonna come, she was gonna go to Glasgow University and be social worker, it were a different plan. There's no point in our plans, we got to get through life, that's all."**
53. Father 1993 Daughter strangled	**No: "I don't think my life will be meaningful, except from the point of view of - the only meaning in my life is for me to go out to work an earn money to feed and clothe my family and to educate "___" (son's name), but that's the only meaning I see in my life. I don't see any other meaning, I don't have a life plan."**
54. Brother 1993 Sister strangled	**Yes: "I've never felt my life wasn't meaningful, so yes."**
58. Mother 1990 Daughter stabbed	**No: "I don't think so unless a miracle happens, I just feel my life's is just done, it's over, I know, maybe I'm being selfish, but I don't care about my other kids, I don't."**

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

59. Brother 1990 Sister stabbed	**Yes: "I think so yeah, I have "___" (daughter's name)."**
66. Stepfather 1993 Stepson beaten and drowned	**Yes: "I feel that I have done that, I wish that I could help "___" (wife's name) to, not overcome her grief cause you can never do that - it's good to grieve to a certain degree, but I see "___" (wife's name) suffer a lot more than I do and I would like to ease that in some way."**
67. Mother 1993 Son beaten and drowned	**Yes: "The fact that, yes, I have family about me, I think, a loving husband, I've got grandchildren, I've still got my other son with me. You've got to do that for them, you can't just take yourself off and think only of yourself, you've got to think of others. You just get on with it really."**
70. Father 1991 Daughter stabbed	**No: "There's nothing to live for."**
71. Mother 1991 Daughter stabbed	**No: "No, never, you can't go on when you've lost both your children; there's no life."**

Table 4-4.3. Responses to Question 62 - "Do you feel that you are or will be able to reconstruct your life to be meaningful again?"

74. Father 1993 Son stabbed	**No: "Not without my son and not knowing what happened."**
75. Mother 1993 Son stabbed	**No: "No, never. I don't think I'll ever be able to forget it. In fact, I won't, I know I won't ever believe it."**
77. Mother 1990 Son beaten	**Yes: "Yes, you try and make it as normal as possible for holidays. You try to kind of do things, you try."**
78. Father 1990 Son beaten	**Yes: "I got to, I have a wee daughter I love so much. "___" (son's name) was taken away from us unfairly."**

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

SUBJECT INFO.	SUBJECT ANSWER
1. Father 1993 Son shot execution style	"The needless way it happened, if it had been an accident we might have been able to accept it, but not the way it happened. A total stranger come along and upset not just my life and my family's life but everybody's life."
2. Mother 1993 Son shot execution style	"I can't bear to think about how he was killed. That to me, he shot him but he didn't need to keep shooting him, he killed him with the first shot so the rest was just needless. That I feel I can't get over and just the very fact that "___" (son's name) was killed - just to get word that he was dead - just so coldly - you hear it, but don't hear it - it doesn't sink in. But the manner of his death it was completely foreign to our way of life."
5. Granddaughter 1991 Grandmother sexually assaulted and beaten	"I think it was probably the sexual, the fact that it took them a month to tell about the sexual part of it. The sexual part was horrific."
7. Wife 1994 Husband beaten stabbed	"Just the companionship not there any longer. As I say just doing all the things that we used to do, you can't do that now. Just everything really. My whole life is just been turned around and I don't think it will ever be back again. I can't see it ever being back again."
8. Mother 1994 Son beaten and stabbed	"Not being with him when he died, to think that he had to die in the street."

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

11. Father 1994 Son beaten and stabbed	**"Well besides my son being murdered and that's first, my wife."**
16. Sister 1993 Brother stabbed	**"The fact that my brother was murdered."**
20. Father 1975 Daughter beaten and thrown from high rise building	**"I suppose the most upsetting is that we don't know the full story."**
21. Brother 1975 Sister beaten and thrown from high rise building	**"Being denied by sister, you have friends who have sisters and you realise that you've got a sister, but there's one severe difference, she's dead and I think that's the crucial one, that's the major one in the whole thing."**
22. Mother 1975 Daughter beaten and thrown from high rise building	**"Not to know exactly what's happened. First and foremost, her being killed."**

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

30. Sister 1993 Brother shot	**"The worst is seeing him lying there and cannot do nothing."**
36. Mother 1992 Son stabbed	**"Just losing "___" (son's name). It just hurts."**
38. Father 1992 Son stabbed	**"Losing my son, I'll never have grandkids, missing him grow up, I wanted him to have a better life."**
39. Mother 1993 Son shot	**"It's a mixture of things, the police, the feeling of being cheated, all the good times I've missed out."**
41. Father-in-law 1994 Son-in-law beaten and stabbed	**"Well, seeing my daughter, you know, but, you know, all things being equal, the life that they should have had and I think about that, you know. And it's really, it's really taken it out of her, you know, there's no question about that."**
42. Mother-in-law 1994 Son-in-law beaten and stabbed	**"Because he was murdered, that's been the most upsetting. If he died in a street accident that would have been traumatic and dreadful, but people to do that to another person."**
44. Daughter 1990 Father stabbed	**"Just watching it all, it happened so quickly and none of us got to say goodbye."**
45. Daughter 1990 Father stabbed	**"For me it would be the people who turned on me at my work, a place I'd worked for 5 years, their attitudes, they couldn't see my grief and pain."**

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

48. Son 1990 Father stabbed	"The way it tore the family apart."
49. Sister 1991 Brother stabbed	"That boy being let out after only four years and at Christmas. If somebody kills somebody, and I feel as if they should get life and when I say life, I don't mean 20 years and out in 12, I mean life to the day they die."
51. Sister 1993 Brother beaten and stabbed	"Losing him."
52. Mother 1993 Daughter strangled	"Seeing her on that post mortem table, with the tubes still in her, her hair was in such a mess, there's just so many. Not being able to see her again."
53. Father 1993 Daughter strangled	"The most upsetting thing was "___" (daughter's name) being murdered. But other than that the most upsetting thing is the, the lack of care shown from other people."
54. Brother 1993 Sister strangled	"I don't know, just not having her around I suppose. She was older than me so I only remembered her being around and she's not around anymore and so that's probably been the worst thing. And also I mean like the deterioration of my family, my mom and dad are really upset about it and that upsets me. Those are the worst things definitely."
58. Mother 1990 Daughter stabbed	"The way it happened and why did it happen like that, if she'd died with cancer, illness, okay, but not like this. Why could he do it to her, she wouldn't hurt a fly."

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

59. Brother 1990 Sister stabbed	**"One, just it happened and how it happened."**
66. Stepfather 1993 Stepson beaten and drowned	**"The fact that "___" (stepson's name) lost his life and the fact that it's hard for "___" (wife's name) and the almost pointless reason for his death."**
67. Mother 1993 Son beaten and drowned	**"Apart from the violent way he died, that's the big aspect of it all, the violent way he died and the thought that it was a friend who did it as well. Just really not having him here and not being part of us."**
70. Father 1991 Daughter stabbed	**"Just losing the kids, the fact that you brought them into this world and they've got just such a short life, a great future ahead of them and it wasn't allowed to happen."**
71. Mother 1991 Daughter stabbed	**"Losing my children; I have no life now."**

Table 4-4.4. Responses to Question 65 - "Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?"

74. Father 1993 Son stabbed	**"There's a multitude, there are several most upsetting aspects. The most upsetting aspect is watching my wife and what's she's been through. Out with the thoughts about what happened to my son and out with the thoughts that it happened and how it happened, the thoughts in his mind as it was happening and the most upsetting aspect is what my wife's gone through.**
75. Mother 1993 Son stabbed	**"No one's been charged, and still walking the street. These four men are still walking the street and who's to say they're not gonna come and attack me or any of the rest of my family."**
77. Mother 1990 Son beaten	**"That he was murdered, that a kid could do something like that."**
78. Father 1990 Son beaten	**"I don't know, I think is was everything, the court case, also the death, he was only 3, his life had hardly begun and it was taken away."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

SUBJECT INFO.	SELF-BLAME WHY?	OTHER BLAME WHO? & WHY?
1. Father 1993 Son shot execution style	NA	Blamed perpetrator: "He was just; it was deliberate. He was a total stranger and I don't know why he did it. He could have taken the car, he took his money off him . He could have took the money and the car and left him in the middle of nowhere - but for some reason he needed to kill "___" (son's name)"
2. Mother 1993 Son shot execution style	NA	Blamed perpetrator: "Because he carried out the act of killing "___" (son's name)."
5. Granddaughter 1991 Grandmother sexually assaulted and beaten	NA	Blamed perpetrator: "For killing her."

Table 4-4.5. Presence of Self and Other Blame and Explanations

7. Wife 1994 Husband beaten stabbed	**NA**	**Blamed victim's brother: "Well, "___" (husband's name) brother for a start. I do blame him for what happened to him. Because if he hadn't insisted that they had gone round to his house with him, "___" (husband's name) would have never been there in the first place. And "___" (husband's name) brother had had a fight with some of the people involved previously, that's nothing to do with "___" (husband's name), but he had something to do with them before and that's why I blame him for it. Because if he'd never insisted that they go round with him, "___" (husband's name) would still be here." Blamed perpetrators: "They are absolutely to blame because they did it and that's all I care about."**
8. Mother 1994 Son beaten and stabbed	**"Because it was me who got "___" (son's name - not victim) football tickets. I begged him not to go near the street that night. "Just for having him (victim) in the first place, bringing him into the world. I do blame myself for having them."**	**Blamed perpetrators: "The way they've been reared."**
11. Father 1994 Son beaten and stabbed	**NA**	**Blamed perpetrators: "He was just rotten to the core. These people are just vermin."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

16. Sister 1993 Brother stabbed	**NA**	**Blamed victim's friends: "Because they knew it was going to happen, it was discussed, they knew somebody could have stopped it."**
20. Father 1975 Daughter beaten and thrown from high rise building	**NA**	**Blamed perpetrator: "Because I feel, I feel very strongly that society influences people's behaviour, you know, but despite that all I believe that people get free will you know, so ultimately he was the person that perpetrated it. One hundred percent to blame."**
21. Brother 1975 Sister beaten and thrown from high rise building	**"I could have taken her home from school."**	**Blamed perpetrator: "He was the most important factor. He was the catalyst for the event."**
22. Mother 1975 Daughter beaten and thrown from high rise building	**"I blame myself for not getting her, for not finding her."**	**Blamed perpetrator: "I blame him for what he's done to my daughter."**
30. Sister 1993 Brother shot	**"For not protecting him."**	**Blamed perpetrator: "Blame him for pulling the trigger."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

36. Mother 1992 Son stabbed	**"I will always blame myself."**	**Blamed perpetrator: "For murdering my son."**
38. Father 1992 Son stabbed	**NA**	**Blamed perpetrator: "It was in him."**
39. Mother 1993 Son shot	**"Cause I knew I could have kept him in the house, I knew it."**	**Blamed perpetrator: "For shooting him."**
41. Father-in-law 1994 Son-in-law beaten and stabbed	**NA**	**Blamed perpetrators: "Well, for doing it, you know. They were the people that were involved, you know, and quite a lot of them, although there was only two of them put away, you know, for life."**
42. Mother-in-law 1994 Son-in-law beaten and stabbed	**NA**	**Blamed perpetrator: "Just what we heard about them and they were setting out for violence. I mean people don't carry weapons unless they're gonna use them."**
44. Daughter 1990 Father stabbed	**NA**	**Blamed perpetrators: "I blame them for doing it, these people set out to do something."**
45. Daughter 1990 Father stabbed	**"I had a premonition and I didn't do anything, I should have been there."**	**Blamed perpetrators: "They were the ones who - no one asked them to come up to the house. They done it."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

48. Son 1990 Father stabbed	**"It was me they were after."**	**Blamed perpetrator: "He was wanting to be a big man and I guess maybe get his revenge." (Had argued earlier with perpetrator)**
49. Sister 1991 Brother stabbed	**"I blame myself because if I had been there that night it never would have happened."**	**Blamed perpetrator: "For doing it, he's just a bad animal."**
51. Sister 1993 Brother beaten and stabbed	**"For not being able to help him, I tried to warn him."**	**"For murdering "___" (brother's name), he could have just beat him."**
52. Mother 1993 Daughter strangled	**"I should have took her home. I was outside the building and I was speaking to her half an hour before she went missing, if I'd just took her home then."**	**Blamed perpetrator: "He did it."**
53. Father 1993 Daughter strangled	**NA**	**Blamed police: "They didn't do anything about it." Blamed perpetrator: "He made the decision to do it."**
54. Brother 1993 Sister strangled	**NA**	**Blamed perpetrator: "He killed her."**
58. Mother 1990 Daughter stabbed	**"I should have been there."**	**Blamed perpetrator: "I blame him for murdering her."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

59. Brother 1990 Sister stabbed	**NA**	**Blamed perpetrator: "Somebody did it."**
66. Stepfather 1993 Stepson beaten and drowned	**NA**	**Blamed perpetrators: "They made the decision."**
67. Mother 1993 Son beaten and drowned	**"I blamed myself for not keeping him safe."**	**Blamed perpetrators: "For being evil and killing my son."**
70. Father 1991 Daughter stabbed	**"As a parent you should sit down, listen to your kids and if they have a problem, you should listen to their problem."**	**Blamed perpetrator: "She murdered "___" (daughter's name)**
71. Mother 1991 Daughter stabbed	**"I should have phoned this girl, I should have done something."**	**Blamed perpetrator: "You can't just stick a knife in and walk off."**
74. Father 1993 Son stabbed	**"Because I tried, but maybe, I have him a lot of opportunities and he wanted - if I'd gave him what he wanted if I'd done what he wanted he probably wouldn't have been where he was at the time he was."**	**Blamed perpetrators: "For the simple reason, for whatever reason, they sat down somewhere and planned to assassinate my son."**

Table 4-4.5. Presence of Self and Other Blame and Explanations

75. Mother 1993 Son stabbed	**"I I'd just been up the road he'd be here today."**	**Blamed perpetrators: "I blame them for murdering him, they must have planned to do it when they went out with masks to do it."**
77. Mother 1990 Son beaten	**"If I'd have been there and hadn't been working."**	**Blamed perpetrator: "For killing him."**
78. Father 1990 Son beaten	**NA**	**Blamed perpetrator: "For murdering him, this kid committed the most ultimate of crime." Blamed perpetrator's mom: "For raising him."**

Blame

Findings from results section 2 revealed that subjects were making attributions of self-blame, other-blame, and dual blame (combined self- and other-blame) for the murder of their relative. Responses to question 20 and 21 addressing the presence of blame attributions and explanation for blame attributions can be found in Table 4-4.5. In terms of the explanation for self-blame attributions, all subjects who blamed themselves engaged in behavioural self-blame and no one reported characterological self-blame. They blamed themselves for what they should have done or what they felt they did not do. These counterfactual thoughts (undoing of the event) have been shown in research to be a common response to traumatic events (Davis, Lehman, Wortman, Silver & Thompson, 1995). In terms of the explanation for other-blame attributions, mainly in relation to the perpetrator, subjects engaged mainly in behavioural other-blame. Subjects blamed the perpetrator for murdering their relative (behavioural) instead of blaming the persons character traits (characterological). Three subjects, however, used characterological other-blame:

> Subject 11 - "He was just rotten to the core. These people are just vermin."
> Subject 49 - "For doing it, he's just a bad animal."
> Subject 67 - "For being evil and killing my son."

Thirty-three subjects blamed the perpetrator for the murder. Four subjects also blamed other people such as the victim's relative (subject 7), the victim's friends (subject 16), the police (subject 53)and the perpetrator's relative (subject 78).

Revenge

Findings from results section 3 revealed that the majority of subjects (twenty-six) experienced feelings of revenge in response to having their family member murdered. These results indicated that feelings of revenge were related to a negative emotional state in the subjects. Subject responses to the question indicated that the majority still experienced feelings of revenge, even years after the event, and that they experienced these feelings daily. When subjects were asked what emotions they were still experiencing at the time of the

interview, only seven subjects answered "vengeful". The following are some of the subject statements regarding their feelings of revenge.

Subject 11 - *"I honestly hope they get murdered in prison."*

Subject 42 - *"Oh yes, you must have (feelings of revenge)."*

Subject 51 - *"I won't rest until something's done to him."*

Subject 58 - *"No, no, I'll leave that to Him (god)."*

Subject 78 - *"Yes, at the beginning (had feelings of revenge) and (they) still goes on."*

Support

Results from section 1 indicated that support seeking subjects were not significantly different from non-support seeking subjects on measures of emotional state and impact of event. This finding, however, should not negate the importance of examining the reasons why subjects sought or did not seek support or whether they felt the support was beneficial. The following are some of the subject responses to question 35 regarding support.

Support Seeking

Subject responses regarding why they sought support after their relative was murdered focused mainly on needing to talk to someone and needing someone who had experienced a similar situation. This information may have important theoretical and practical implications in that these secondary victims of murder see themselves as different from other bereavement groups. Therefore, it may be of interest to keep this type of bereavement/adjustment research separate from other trauma groups and for support interventions to be geared towards the specific needs of such a bereavement group.

Subject 8 (support) *"Helpful to meet somebody with the same pain."*

Subject 49 (support) *"Cause I was nuts. My brother talked to me and he knew that I needed help. It helped me, it definitely helped me."*

Subject 51 (support) *"I felt somebody understood."*

Subject 52 (support) *"The whole time we were in (over-seas), we felt so isolated. We just felt that we needed somebody who understood."*

Subject 53 (support) *"It helps me constantly not thinking that I'm the only one."*

Subject 58 (support) *"You don't have to put a face on coming here. When you go outside you have to put a face on, but when you come here you don't."*

Subject 75 (support) *"I just felt I had to talk to somebody."*

Non-Support Seeking

Non-support seeking subjects responded that they did not seek support for several reasons, some of which appeared as avoidance behaviours. Some subjects found the meetings too distressing or they did not want to talk about their situation all the time. Others felt they did not need support or counselling and would try to help themselves. Results section 4.1 found, however, that overall, non-support seeking subjects had significantly lower scores on the avoidance behaviour sub-scale of the IES than support seeking subjects.

Subject 22 (non-support) *"I went when group started but found it so distressing - quite distressing."*

Subject 30 (non-support) *"I don't want to talk about it all the time."*

Subject 38 (non-support) *"Looked to myself for support."*

Subject 41 (non-support) *"No, see I'm not one for public speaking or speaking in front of a lot of people and that's why I try to do it myself like, you know."*

Subject 42 (non-support) *"No, I just get myself too upset to go anywhere. I get so upset about it. I just try to carry on myself."*

Subject 54 (non-support) *"I didn't feel I had a need to go. I didn't want to go."*

Subject 66 (non-support) *"I didn't feel that I needed counselling."*

Self-Change

Subject were asked in question 39 whether they felt differently about themselves after their relative was murdered. This question was asked in an attempt to determine whether such a negative event could bring about changes in people's perceptions of themselves. Responses

to this question revealed that most subjects did feel differently about themselves, mostly in a negative manner. Few of the subjects felt that the event resulted in positive changes in themselves. Some of the subject responses follow divided into negative and positive change categories.

Negative

Subject responses regarding self-change elicited mostly negative changes. Subjects felt they would never be the same, had lost their confidence and identity, and had increased levels of hate never before felt. These responses about the loss of confidence are in line with the results from section 4.1 discussing the increase in negative affect and decrease in positive affect, elements of which included anger and confidence. In addition, in response to the question concerning emotions still experienced, the majority of subjects reported anger and hatred.

Subject 5 - *"I will never be the same."*

Subject 48 - *"I'm on guard all this time, at times violent mood swings, addictions. I had mental illness and was suicidal. It made me very paranoid."*

Subject 49 - *"I used to be a quiet person and now look at me. I have so much hate in me."*

Subject 52 - *"I'm not as confident as I used to be. I used to be a real outgoing person but I don't go out anymore."*

Subject 58 - *"I look in the mirror and I say to myself 'who is that looking at me' cause that's not me in the mirror."*

Subject 59 - *"I think I'm a lot harder - nothing shocks me. It's made me a very hard person."*

Subject 70 - *"I feel I have a lot of hate in me that I've never had before, never, never had hate in me."*

Positive

The seven subjects that talked about positive self-changes discussed several topics. These included feeling stronger, being more empathetic and listening more and not letting the small things in life worry them. No significant difference between subjects who stated negative

changes and subjects who stated positive changes occurred on the agreeable/hostile scale of the POMS-BI (negative, mean = 13.23, s.d. = 6.11; positive, mean = 16.43, s.d., = 6.29), which for the positive scale included adjectives such as "kindly" and "sympathetic". Subjects who stated positive changes, however, did have a higher mean score on the scale although not significant which indicated that these subjects felt more agreeable than hostile in comparison to subjects who stated negative changes.

Subject 16 - *"I've changed, I'm a lot stronger because of this."*

Subject 20 - *"I'm a better person for it."*

Subject 21 - *"Yes, good changes. More compassionate, abhor suffering."*

Subject 36 - *"I feel differently about everything, I try not to be a bitter person and I'm trying to live my life as (son's name) would have wanted me to live my life."*

Subject 44 - *"I think I'm more stronger."*

Subject 67 - *"It changed my whole outlook to people. I tend to listen to people more, to their problems. I try to help people."*

Subject 74 - *"I see life different. I understand a lot of people differently and lots of things in life which are not as important as I used to think they were - the small things in life. I don't worry too much."*

World View Change

Question 40 asked subjects whether their views about the world had changed since the murder of their relative. Most of the responses revealed that subjects now believed that the world was a 'bad', 'evil' or 'unsafe' place. Subjects also stated that they felt the world was more violent, less caring, a horrible place and the laws were terrible. Results from section 4-3 found that on the whole, subjects had low levels of a belief in a just world which these responses appeared to justify. Some of the subject responses to this question are below grouped by response category.

World as Bad Place

Subject 41 - *"I think it's a sad, sad world, I think it's a bad world now, and as I say, mind you, the good people are still in the majority, you know. But I think it's a terrible work actually."*

Subject 58 - *"It's a bad place, bad, bad, bad place. That's why I only feel safe in my own home."*

Subject 49 - *"The world's a bad world now. The young ones have no respect for anybody. They want stuff and they don't care how they get it as long as they get it. A lot of them are on drugs cause they don't have jobs."*

World as Evil Place

Subject 1 - *"I think the world is a more evil place I never thought it was before, you know. I think there are an awful lot of bad people, before I never gave it a thought, you know."*

World as Unsafe Place

Subject 30 - *"Not safe."*

Subject 48 - *"You're not safe."*

Subject 51 - *"It's a dangerous world. It's not a very good world. It's hell."*

Subject 52 - *"The world's not safe anymore."*

Subject 70 - *"The world's not safe."*

Subject 2 - *"If you go out you want to get nome quicker, you feel safer in your own home."*

Miscellaneous

Subject 8 - *"I don't like the world at all now because every week now you read the paper and someone else is murdered."*

Subject 11 - *"The law is terrible, it's a laughing stock."*

Subject 21 - *"The world's a very cruel and oppressive place."*

Subject 22 - *"It's not a perfect world. I have a fear of the world, it's becoming more and more violent."*

Subject 38 - *"It's getting more violent, less caring."*

Subject 39 - *"I feel sorry for my daughter and I'm afraid for the grandchildren."*

Subject 42 - *"It makes you aware of what's going on."*

Subject 44 - *"I feel as though the laws are terrible."*

Subject 45 - *"I know there's a lot of horrible people out there and I think, 'why?'."*

Subject 59 - *"If I'm walking late at night and a guy comes towards me I would suspect him to be carrying a knife. I expect the worst and I'm prepared for the worst."*

Subject 67 - *"Yes, nobody helped (son's name) when he needed help."*

Subject 71 - *"The world's a horrible place."*

Subject 75 - *"It has changed because murder occurs every day."*

Subject 78 - *"I'm more aware of things going on about. More cautious with my family."*

Control

Subjects were asked in question 24 to what extent they felt the murder was caused by something they could have controlled and in question 25 what they felt was either controllable or uncontrollable. Results from section 2 revealed a low level of controllability in responses. Subject did not feel that they had much controllability over the murder occurring. Some of the subject responses to these questions follow.

Completely Uncontrollable

Subject 20 *"The time, just the time scale of the whole thing."*

Subject 36 *"The fact that he was out anyway."*

Subject 38 *"I didn't know the situation."*

Subject 39 *"It was unexpected, you know."*

Subject 41 *"Well, just the way things worked out, you know. My daughter came down to take (victim's name) and the other brother, he just stayed around the corner. But for some reason or other, they decided just to make sure that he got home, where he was going, and this is how it all started. It they had gone in the car with my daughter, which they did many of many of times, he would have been alive today. As I say, it was all 'if this' and 'if that'."*

Subject 48 *"If someone gets it into their head to come to your door and do you damage, you can't stop them."*

Subject 54 *"I didn't control it at all really unless I physically grabbed my sister and say you're not going out tonight."*

Subject 59 *"The distance - just that it happened 250 miles away."*

Subject 66 *"Just not knowing the way the events would unfold."*

Subject 74 *"How can you control a murder?"*

Subject 77 *"The fact that you don't think anything like that is gonna happen."*

Moderately Controllable

Subject 7 *"Well, as I say, it could have been avoided if he had come home with me that night in the car. But that's the only way it could have been avoided. Or if he had just told his brother no he wasn't going home with him that night, he wouldn't have been there and wouldn't have done that."*

Subject 22 *"That boy."*

Subject 71 *"I don't know, I should have phoned the school and said something."*

Completely Controllable

Subject 51 *"It wasn't as if it were big money."*

Subject 53 *"If I hadn't of taken her there or we hadn't put strict conditions on her that night she wouldn't have had a occasion to hide from us that night."*

Subject 58 *"If I had been there, I would have pushed her to the side, I would have pushed her away."*

Subject 70 *"If we had listened to (daughter's name) complaints we could have went to the school and said, 'Look she's getting bullying off this girl' and I think at the time then, something would of been done."*

DISCUSSION

These qualitative results appear to validate the quantitative findings from result sections 1, 2 and 3. These results help further to illustrate the negative emotional state and impact of event that these secondary victims of murder experienced. The high levels of negative emotional state and event-related impact found in the empirical results sections were clearly supported by victim responses to such questions as those regarding current emotions and the impact of the murder on their lives. Subjects reported many negative emotions (e.g., anger, sadness, depression) that they were still experiencing daily, even many years after the crime occurred. Perhaps these distressing emotions that they experience daily act to encourage rumination, which in turn, leads to a prolonged trauma response. Most subjects reported that they would not be able to reconstruct their lives to be meaningful again after the murder of their relative. Coupled with their beliefs that their lives were "ruined", these beliefs may serve to increase negative emotional state.

Subjects spoke about their attributions of self-blame for the crime in a manner which was self-implicating. Subjects outlined what they "could have done" or "should have done" to stop the murder from occurring. These counterfactuals, as shown in previous research, may allow subjects to ruminate about the situation thereby increasing negative emotional state and event-related impact. By not forgiving themselves for something in which they were not directly involved, they may be unable to cope satisfactorily in order to reach a level of adjustment to the bereavement. Further, the feelings of negative self-change and negative world views described by the majority of subjects may produce feelings of low self-esteem and helplessness, which in turn, may permit higher levels of depression and distress.

Subject responses to the question regarding support seeking provide an insight into the needs of such a trauma group. These respondents discussed their need to speak to someone, especially someone who had experienced a similar situation. The need to be "understood" emerges as a significant desire. Wanting to feel they belong to some bereaved collective who have a shared experience, even with the individual differences between crimes, appears to be a source of support for this group. For subjects who were not actively involved in support or who had never sought support, their responses centred around the distressing nature of the support group, no need for support and the need to help oneself. These subjects, however, were found in results section 1 not to be significantly different from subjects seeking support

in terms of levels of emotional state and event-related impact as both groups were experiencing high levels of negative emotional state and event-related impact.

The intensity of the negative emotions and the impact of the murder was more evident in the responses to the open interview questions than the closed questions on the standardised measures, as intensity is more difficult to empirically assess. Subjects were able to describe their trauma in their own words, and therefore, were not constrained by the language of the assessment measures (e.g., being able to use words which conveyed more intense emotions). By using open questions, in addition to standardised measures, a clearer picture emerges of the trauma secondary victims endure in their adjustment to bereavement through murder.

CHAPTER 5

LONGITUDINAL STUDY INVESTIGATING CHANGE OVER TIME, REPLICATION OF PRIOR RESULTS, PREDICTIVE RELATIONSHIPS AND DISABLING DISTRESS IN SECONDARY VICTIMS OF MURDER

INTRODUCTION

The aim of this chapter was to investigate longitudinally changes in emotional state and event-related impact over time, replication of previous significant results from Chapter 4, predictive relationships and disabling distress in secondary victims of murder. No longitudinal research with secondary victims of murder has been conducted, therefore, little has been established about the course of their adjustment over time. In order to gain a better understanding of this process, examination of emotional state and event-related impact and predictive relationships is warranted.

An important topic in psychological research has been concerned with the adjustment outcome in people who have experienced traumatic events. In a study with violent crime victims, victims of property crime and non-victims, Norris and Kaniasty (1994) found that violent crime victims were still experiencing symptoms such as depression and anxiety three months after the crime occurred. Although levels of negative emotional state decreased over the next six months, at fifteen months post-crime, victims of violent crime still experienced more negative emotional state than victims of property crime and non victims. Ell, Nishimoto, Mantell & Hamovitch (1988) found that the significant others of cancer patients showed a significant decrease in psychological adjustment from diagnosis to an assessment one year later. These distressed significant others continued to remain distressed over time and had a decline in mental health status over time. In addition, other studies have shown that levels of negative emotional state remain significantly high years after the event occurred (e.g., Lehman, Wortman & Williams, 1987; Ursano, Fullerton, Kao & Bhartiya, 1995; Vachon, Rogers, Lyall, Lancee, Sheldon & Freeman, 1982).

Attempting to determine what psychological variables predict future adjustment outcome has been important to health and trauma research. For example, Johnston, Earll,

Giles, McClenahan, Morrison & Stevens (in press) found in their study with patients suffering from ALS/MND (Amyotrophic Lateral Sclerosis/Motor Neurone Disease) that mood predicted survival, disease progression and disability at six months. Dalgliesh, Joseph, Thrasher, Tranah & Yule (1996) found a predictive relationship between reported support and later post-traumatic stress disorder. They found that disaster survivors who received immediate support had lower future levels of post-traumatic symptoms. In addition, a question has arisen as to why some victims of traumatic events adjust while others appear to remain distressed, even years after their traumatic episodes. People who are disabled by their distress are not able to move forward towards adjustment. Joseph, Dalgleish, Thrasher, Yule, Williams & Hodgkinson (1996) found that in survivors of the Herald of Free Enterprise disaster, scores on the Impact of Events Scale at three years post-disaster (both sub-scales for intrusive thoughts and avoidance behaviours) predicted depression and anxiety five years later. They suggest that these findings are due to the continued processing of the event and that assimilation of the event has not occurred, therefore, these survivors are not moving forward in their adjustment process. These types of findings could prove beneficial in the identification of people who may be at increased risk for poor adjustment.

The results section in this chapter has been divided into four sections. The first section investigated the occurrence of changes over time (six months and twelve months post-interview) in emotional state and event-related impact, attributions of blame, control cognitions, just world beliefs and feelings of revenge. These findings were of interest in determining whether psychological distress declined or persisted over a twelve month period in an attempt to better understand the adjustment process in this victim sample. Further, this section sought to identify changes in blame, control and revenge cognitions which would provide a clearer insight into how these cognitions fit into the adjustment process.

The second section tested whether significant relationships between blame, revenge and emotional state and event-related impact found at Time 1 remained significant at the six and twelve month assessments (Time 2 & Time 3). These results would show how consistent findings regarding emotional state and event-related impact and blame and revenge cognitions are over time.

In the third section predictive relationships were explored in an attempt to understand what psychological variables measured at the initial interview best predicted emotional state

and event-related impact six and twelve months later. By doing so, a clearer picture of the adjustment process would be obtained.

And finally, section four examined the concept of disabling distress, distress that interfered with daily life. This section was an attempt to identify how secondary victims of murder who are not functioning or moving towards adjustment due to their distress were different from those who were not disabled by their distress.

Research questions addressed in the chapter were:

1. Change Over Time

   Are there changes over time in:

   a. Levels of emotional state and event-related impact
   b. Levels of blame attributions
   c. Levels of control cognitions and just world beliefs
   d. The presence/absence of feelings of revenge

2. Replication

   Are the relationships between emotional state/event-related impact and blame/revenge found at the time of interview replicable at one year after the interview?

3. Prediction

   Are demographic/crime characteristics, emotional state and event-related impact, blame attributions and feelings of revenge predictive of:

   a. Emotional state and event-related impact over time
   b. An over-all adjustment outcome

4. Disabling Distress

   Are some secondary victims of murder suffering from distress that interferes with daily life and if so, how are these victims different from those who are not experiencing disabling distress?

METHODOLOGY

Design

A longitudinal study was designed in which subjects who participated in the interviews described in Chapter 4 were contacted at six months post-interview (Time 2) and again at

twelve months post-interview (Time 3). At Time 2, subjects completed three standardised psychological measures used to assess emotional state and event-related impact. At Time 3, subjects completed a one-year follow-up bereavement questionnaire which was concerned with the impact of murder on their lives over the past year. In addition, subjects completed four psychological measures to assess emotional state and event-related impact. These procedures in data collection were used in order to limit the burden on subjects while ensuring useful data collection over the twelve month period.

Materials

Standardised Measures

The standardised measures used were the General Health Questionnaire 28 (GHQ-28), the Profile of Mood States Bi-Polar form (POMS-BI) the Impact of Event Scale (IES) and the Just World Scale (JWS). For detailed description of these measures, see Chapter 4 methods section.

One-Year Follow-Up Bereavement Questionnaire

The one-year follow-up questionnaire (see Appendix B) was designed to gather information to assess the impact of bereavement through murder during the year following the initial interview. Three specific topic areas were used: (1) attributional searching and attributions of blame [questions 1 - 26], (2) effects of the crime on the subject's life (including questions addressing psychological, behavioural and health-related effects and changes [questions 27 - 57], and (3) a general question regarding experiences with crime, unpleasant events and death of significant others [question 58]. These were the same questions as those in the initial interview schedule. All questions were with regards to the "past year".

Questionnaire Assessment Questions

Several questions from the one-year follow-up bereavement questionnaire (see Appendix B) were used as assessment measures. These questions included topic areas of support, attributions of blame, control cognitions and feeling of revenge. In order to determine whether subjects were actively involved in support at one-year post-interview, subjects were asked questions regarding support seeking in questions 31 and 33. Question 31

asked subjects, "In the past year, have you sought professional help/counselling?" and question 33 asked subjects, "Are you still seeking support?" Subjects who were still seeking support at one-year post-interview were placed in the support category and subjects who had not sought support in the past year or were not still seeking support were placed in the no support category.

In order to assess attributions of blame, questions 10 (victim blame), 12 (self-blame), 14 (other-blame), 16 (environmental blame), 18 (societal blame) and 20 (chance blame) were used. These questions asked how much subjects blamed each of the attributions "At this point in time". Subjects rated each of the six blame attributions on a six-point scale with "1" being not at all to blame and "6" being high level of blame.

In order to assess past and future control cognitions, questions 22 and 24, respectively, were used. Question 22 asked subjects, "To what extent do you now feel the murder was caused by something you could have controlled?" Subjects were asked to rate the controllability of the event on a five-point scale with "1" as completely uncontrollable to "5" being completely controllable. Question 24 asked subjects, "To what extent do you now feel you have control over a similar event happening to yourself in the future?" Subjects were asked to rate the controllability of a future event on a five-point scale with "1" as completely uncontrollable to "5" as completely controllable.

In order to assess feelings of revenge, question 43 was used. Subjects were asked, "In the past year, have you experienced feelings of revenge?" Subjects who indicated "yes" to having experienced feelings of revenge were placed in the revenge category and subjects who indicated "no" to having experienced feelings of revenge were placed in the no revenge category.

Overall Adjustment

An adjustment variable was created in order to have a succinct, overall assessment of adjustment outcome and, in addition, to decrease the number of independent variables in order to reduce Type I errors. This overall adjustment variable was created by converting the GHQ-28 total score, the IES total score, the POMS-BI negative affect score and the POMS-BI positive affect score to *z* scores , summing the scores (POMS-BI positive affect was reverse scored) and dividing by four. Higher scores indicated increased negative emotional state and event-related impact. Overall adjustment variables were created for Time 1, Time 2 and Time

3. Reliability analyses indicated adequate internal consistency for the Time 1 overall adjustment variable (Cronbach's alpha = .86), Time 2 overall adjustment variable (Cronbach's alpha = .80) and for the Time 3 overall adjustment variable (Cronbach's alpha = .83). The basis for the creation of this variable was the same as that used in studies by Johnston, Earll, Giles, McCleanahan, Morrison & Stevens (in press) and McDonald, Wiedenfeld, Hillel, Carpenter & Walter (1994). In their study with patients suffering from ALS/MND (Amyotrophic lateral Sclerosis/Motor Neurone Disease), Johnston et al. found the overall mood variable created by summing standard scores was predictive of survival, disease progression and disability at six months.

Disabling Distress

A measure of disabling distress, distress that interferes with daily life, was created using the GHQ-28, as it was the variable at Time 1 which best predicted overall adjustment at Time 2 and Time 3. Disabling distress was characterised by a GHQ-28 total score which met the criterion for "caseness" as subjects who scored above threshold were deemed as GHQ-28 cases and suffering from disabling distress. Subjects who scored below threshold were deemed as GHQ-28 non-cases and not suffering from disabling distress. In addition, this concept was defined by three subjects who did not participate at Time 3 and gave explanations for their inability to participate any longer. Two of the subjects explained that they were too distressed by the whole situation to continue to participate and complete the measures and questionnaires. The third subject explained that he was back on drugs and alcohol and he was unable to continue participation. These three subjects were classified as being disabled by their distress as they were not capable of continued participation.

Subjects

All thirty four subjects from "Families of Murdered Children" (F.O.M.C.) who participated at Time 1 participated in the Time 2 phase. At Time 3, twenty subjects[1] from the original thirty-four F.O.M.C. sample participated (response rate = 59%). Table 5.1 presents

[1] One subject completed the standardised measures, but did not complete the one year follow-up questionnaire at Time 3. Eleven subjects were non responders and three subjects responded but did not participate.

demographic and crime information for participants, non-responders and non-participants at Time 3.

Table 5.1. Demographic and Crime Information For Participants, Non-Responders and Non-Participants at Time 3.

Characteristics of the Subjects	Participants (n = 20)	Non-Responders (n = 11)	Non-Participants (n = 3)
Mean Age	43.35 (14.68)	41.27 (8.55)	53.33 (18.58)
Gender			
Male	8 (40.0%)	4 (36.4%)	2 (66.7%)
Female	12 (60.0%)	7 (63.6%)	1 (33.3%)
Marital Status			
Single	4 (20.0%)	1 (9.1%)	1 (33.3%)
Married	12 (60.0%)	8 (72.7%)	2 (66.7%)
Divorced	2 (10.0%)	2 (18.2%)	0
Widow/er	2 (10.0%)	0	0
Employment Status			
Student	4 (20.0%)	0	0
Part-time Employed	3 (15.0%)	2 (18.2%)	0
Full-time Employed	6 (30.0%)	4 (36.4%)	0
Unemployed	4 (20.0%)	5 (45.5%)	1 (33.3%)
Retired	3 (15.0%)	0	2 (66.7%)
Relationship to Victim			
Mother	7 (35.0%)	4 (36.4%)	0
Father	5 (25.0%)	3 (27.3%)	0
Sister	2 (10.0%)	2 (18.2%)	0
Brother	3 (15.0%)	0	0
Daughter	1 (5.0%)	1 (9.1%)	0
Son	0	0	1 (33.3%)
Wife	1 (5.0%)	0	0
Granddaughter	1 (5.0%)	0	0
Step-father	0	1 (9.1%)	0
Mother-in-law	0	0	1 (33.3%)
Father-in-law	0	0	1 (33.3%)
Support/Non-Support			
Yes	8 (40.0%)	5 (45.5%)	0
No	12 (60.0%)	6 (54.5%)	3 (100%)
Characteristics of the Crime			
Total Murders	12	9	2
Year of Crime			
1975	3 (15.0%)	0	0
1990	3 (15.0%)	3 (27.3%)	1 (33.3%)
1991	2 (10.0%)	2 (18.2%)	0
1992	1 (5.0%)	1 (9.1%)	0
1993	5 (40.0%)	5 (45.5%)	0
1994	3 (15.0%)	0	2 (66.7%)

Procedure

The study was given ethical approval by the University Ethics Committee in 1995. At six months post-interview, subjects were sent three psychological measures (GHQ-28, POMS-BI & IES). Subjects were asked to complete them as soon as possible and return them to the researcher in the provided envelope.

At one-year post-interview, subjects were sent the follow-up bereavement questionnaire and four psychological measures (GHQ-28, POMS-BI IES & JWS). Subjects were asked to complete the questionnaire and measures as soon as possible and return them to the researcher in the provided envelope. Subjects who did not return the materials within two weeks were sent a follow-up packet and a letter requesting their participation. Subjects who did not respond to the second mailing were sent a third and final packet, again with a letter asking for their participation. If subjects were non-responsive to the third attempt, they were not contacted again.

RESULTS

The results sections has been divided into four sections, each examining a specific question. The first section examined the change over time in emotional state and event-related impact, attributions of blame, control cognitions and just world beliefs and feelings of revenge(Time 1, Time 2 & Time 3). The second section tested whether significant relationships between blame/revenge and emotional state/event-related impact found at Time 1 (time of interview) were still significant at Time 2 (six months post-interview) and at Time 3 (one year post-interview). The third section examined the predictive relationships between demographic/crime characteristics, emotional state and event-related impact, blame attributions and revenge from Time 1 and future emotional state and event-related impact (Time 2 & Time 3). And finally, the fourth section investigated whether subjects were experiencing disabling distress at Time 3 and in addition, whether significant differences in Time 1, Time 2 and Time 3 emotional state and event-related impact, attributions of blame and control cognitions occurred between subjects who experienced disabling distress and those who did not.

Reliability of Measures

Reliability analyses were carried out on the sub-scales of the standardised measures used at Time 2 and Time 3 to assess the level of internal consistency. All of the measures were of an acceptable level with a Cronbach's alpha of >.6, with the exception of the JWS at Time 3. The individual Cronbach alpha scores are presented in Table 5.2.

Table 5.2 - Reliability Analysis with Cronbach Alpha.

MEASURE	TIME 2 CRONBACH'S ALPHA	TIME 3 CRONBACH'S ALPHA
GHQ-28 Somatic Symptoms	.87	.84
GHQ-28 Anxiety/Insomnia	.79	.90
GHQ-28 Social Dysfunction	.92	.86
GHQ-28 Severe Depression	.93	.89
POMS-BI Composed/Anxious	.86	.87
POMS-BI Agreeable/Hostile	.66	.67
POMS-BI Elated/Depressed	.87	.88
POMS-BI Confident/Unsure	.86	.89
POMS-BI Energetic/Tired	.87	.87
POMS-BI Clearheaded/Confused	.89	.82
IES Intrusion	.90	.80
IES Avoidance	.87	.77
JWS Total	--	.53
Overall Adjustment	.80	.83

I. Change Over Time

Time 1 → Time 2

Comparisons were made between Time 1 and Time 2 on measures of emotional state and event-related impact as a full data set with the entire sample of thirty-four subjects was available. Means, standard deviations and *t* and *p* values for measures of emotional state and event-related impact for the comparison of Time 1 (at time of interview) with Time 2 (six months post-interview) are presented in Table 5.3. Paired sample t-test analyses found significant decreases from Time 1 to Time 2 on the IES avoidance sub-scale [$t(33) = 2.59$, $p = .01$], the IES intrusion sub-scale [$t(33) = 4.07$, $p = .000$] and the IES [$t(33) = 3.51$, $p = .001$]. In each case, IES scores reduced. No significant differences emerged between Time 1 and Time 2 on any of the other measures (GHQ-28 & POMS-BI).

Table 5.3. Comparison of GHQ-28, POMS-BI, IES & Overall Adjustment At Time 1 and Time 2: Means, Standard Deviations and *t* and *p* Values

	Time 1	Time 2	*t(33)*	*p*
(1) GHQ-28 Somatic Symptoms	11.15 (4.86)	10.24 (4.63)	1.16	ns
(2) GHQ-28 Anxiety/Insomnia	12.65 (5.12)	12.41 (4.96)	.32	ns
(3) GHQ-28 Social Dysfunction	12.21 (4.89)	12.41 (4.99)	-.33	ns
(4) GHQ-28 Severe Depression	9.68 (5.90)	10.44 (6.56)	-1.42	ns
(5) GHQ-28 Total	45.68 (17.81)	45.50 (18.05)	.10	ns
(6) POMS-BI Negative Affect	75.35 (23.77)	79.24 (20.46)	-1.40	ns
(7) POMS-BI Positive Affect	33.91 (20.98)	34.88 (18.08)	-.34	ns
(8) POMS-BI Composed/Anxious	9.53 (8.49)	8.12 (6.51)	1.23	ns
(9) POMS-BI Agreeable/Hostile	14.29 (6.34)	13.32 (5.06)	.98	ns
(10) POMS-BI Elated/Depressed	8.76 (7.97)	8.76 (7.11)	.00	ns
(11) POMS-BI Confident/Unsure	12.00 (8.64)	11.44 (7.36)	.52	ns
(12) POMS-BI Energetic/Tired	8.79 (6.86)	8.76 (6.63)	.03	ns
(13) POMS-BI Clearheaded/Confused	13.06 (9.58)	13.21 (8.09)	-.13	ns
(14) IES Avoidance	18.41 (11.60)	14.18 (10.17)	2.59	.01
(15) IES Intrusion	24.91 (9.53)	19.74 (9.72)	4.07	.000
(16) IES Total	43.32 (19.54)	33.91 (18.56)	3.51	.001
(17) Overall Adjustment	.00 (.84)	-.00 (.81)	.00	ns

Time 1 → Time 3

Comparisons between Time 1 and Time 3 involved a smaller group of participants, but more measures. For comparisons of Time 1 and Time 3, three separate sections of analyses were conducted: (1) comparisons of emotional state and event-related impact, (2) comparisons of blame attributions, (3) comparisons of control cognitions, just world beliefs and feelings of revenge.

Emotional State & Event-Related Impact

Means, standard deviations and *t* and *p* values for measures of emotional state and event-related impact for the comparison of Time 1 (at time of interview) with Time 3 (twelve months post-interview) are presented in Table 5.4. Paired sample t-test analyses found no significant differences between Time 1 and Time 3 on any measure of emotional state and event-related impact. There was, however, a significant difference between overall adjustment at Time 1 and Time 3. Overall adjustment at Time 3 was poorer than at Time 1.

Table 5.4. Comparison of GHQ-28, POMS-BI, IES & Overall Adjustment At Time 1 and Time 3: Means, Standard Deviations and *t* and *p* Values.

	Time 1	Time 3	*t(19)*	*p*
(1) GHQ-28 Somatic Symptoms	9.85 (4.80)	8.60 (4.60)	1.26	ns
(2) GHQ-28 Anxiety/Insomnia	10.90 (4.42)	10.55 (4.54)	.58	ns
(3) GHQ-28 Social Dysfunction	10.95 (4.63)	10.80 (4.05)	.21	ns
(4) GHQ-28 Severe Depression	8.30 (5.38)	8.80 (5.76)	-.46	ns
(5) GHQ-28 Total	40.00 (16.95)	38.75 (16.09)	.55	ns
(6) POMS-BI Negative Affect	70.90 (24.49)	74.80 (19.89)	-.93	ns
(7) POMS-BI Positive Affect	37.60 (23.55)	32.90 (20.34)	1.38	ns
(8) POMS-BI Composed/Anxious	11.80 (8.97)	10.15 (7.21)	.84	ns
(9) POMS-BI Agreeable/Hostile	15.75 (5.81)	13.85 (4.93)	1.64	ns
(10) POMS-BI Elated/Depressed	9.85 (8.20)	8.65 (7.72)	.79	ns
(11) POMS-BI Confident/Unsure	12.85 (9.17)	11.20 (7.78)	1.32	ns
(12) POMS-BI Energetic/Tired	9.45 (7.74)	7.75 (6.97)	1.24	ns
(13) POMS-BI Clearheaded/Confused	15.10 (10.09)	14.60 (6.74)	.35	ns
(14) IES Avoidance	16.55 (11.54)	15.00 (9.23)	.99	ns
(15) IES Intrusion	24.55 (8.53)	22.95 (7.98)	1.94	ns
(16) IES Total	41.10 (17.76)	37.95 (14.97)	1.61	ns
(17) Overall Adjustment	-.20 (.85)	.00 (.82)	-2.23	.05

Attributions of Blame

A comparison was made between Time 1 and Time 3 for the total number of blame attributions made by subjects. A paired sample t-test found a significant difference. Subjects were making significantly more attributions of blame at Time 3 (mean = 3.79, s.d. = 1.18) than at Time 1 (mean = 3.16, s.d. = .96) [t(18) = -2.88, p = .01]. Means, standard deviations and *t* and *p* values for levels of blame for the six blame attributions (chance, environment, other, self, society and victim) in comparison of Time 1 and Time 3 are presented in Table 5.5.

Table 5.5. Comparison of Six Blame Attributions, Control Cognitions & Just World Beliefs at Time 1 and Time 3: Means, Standard Deviations and *t* and *p* Values.

	Time 1	Time 3	*t(18)*	*p*
(1) Level of Chance Blame	3.37 (2.24)	3.11 (1.94)	.50	ns
(2) Level of Environmental Blame	2.89 (2.18)	2.89 (1.70)	.00	ns
(3) Level of Other Blame	5.79 (.63)	5.84 (.69)	-.44	ns
(4) Level of Self Blame	2.84 (2.29)	2.21 (1.55)	1.48	ns
(5) Level of Societal Blame	3.05 (2.15)	4.74 (1.45)	-3.72	.002
(6) Level of Victim Blame	1.16 (.50)	1.11 (.46)	.33	ns
(7) Level of Past Control	1.63 (1.21)	1.68 (1.16)	-.17	ns
(8) Level of Future Control	1.47 (.84)	1.74 (.93)	-1.23	ns
(9) Just World Total	38.25 (8.98)	39.10 (9.51)	-.37	ns

Paired sample t-test analyses found only one significant difference between levels of blame from Time 1 to Time 3. Subjects had significantly higher levels of societal blame at Time 3 (mean = 4.74, s.d. = 1.45) than at Time 1 (mean = 3.05, s.d. = 2.15) [t(18) = -3.72, p = .002]. No other significant differences emerged.

Control Cognitions, Just World Beliefs and Feelings of Revenge

A comparison was made between Time 1 and Time 3 control cognitions, just world beliefs (see Table 5.5) and feelings of revenge. Paired sample t-tests found no significant differences between Time 1 and Time 3 on levels of past control (1.63 vs. 1.68), levels of future control (1.47 vs. 1.74) and levels of just world beliefs (38.25 vs. 39.10). McNemar

change test found no association between the presence or absence of revenge at Time 1 and the presence or absence of revenge at Time 3 ($p = .38$).

Time 1 → Time 2 → Time 3

In order to determine the existence of changes in emotional state and event-related impact over time, four separate repeated measures ANOVAs were conducted. Time 1, Time 2 and Time 3 values for the GHQ-28 total, the IES total, the POMS-BI negative affect and the POMS-BI positive affect were used. The repeated measures ANOVAs found no significant differences in scores between Time 1, 2 and 3 on the GHQ-28 total score ($F(2,38) = .19$, $p = .82$), the POMS-BI negative affect score ($F(2,38) = .61$, $p = .55$), and the POMS-BI positive affect score ($F(2,38) = 1.10$, $p = .34$). A significant difference emerged, however, on the IES total score ($F(2,38) = 14.14$, $p = .000$). A Newman-Keuls post hoc test indicated that the IES total score at Time 1 was significantly higher than at Time 2 (means = 43.32 vs. 33.91, $p < .01$) and at Time 3 (means = 43.32 vs. 37.95, $p < .05$). Figures 5.1, 5.2, 5.3 and 5.4 show change in means scores of the GHQ-28, the IES, the POMS-BI negative affect and the POMS-BI positive affect from Time 1 to Time 2 to Time 3.

In summary, at six and twelve months post-interview, levels of negative emotional state remained unchanged and high. There was a significant decrease in event-related impact. At twelve months post-interview there were no differences on control cognitions (past and future) and just world beliefs. However, there were more blame attributions reported and higher levels of societal blame than at the initial interview

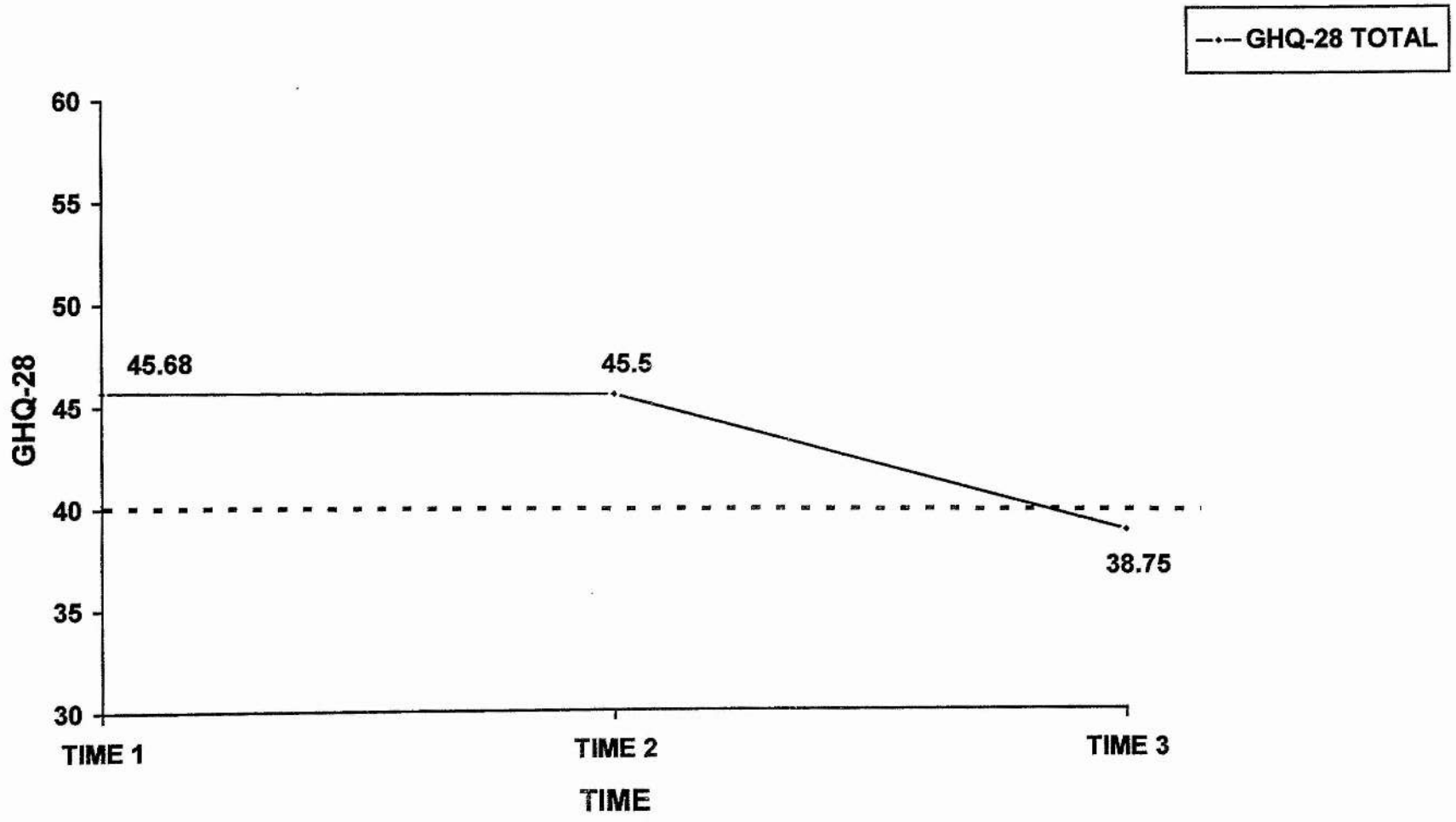


Figure 5.1. Mean Levels of GHQ-28 Total Score at Time 1, Time 2 & Time 3
Bold dotted line indicates the threshold for GHQ-28 caseness

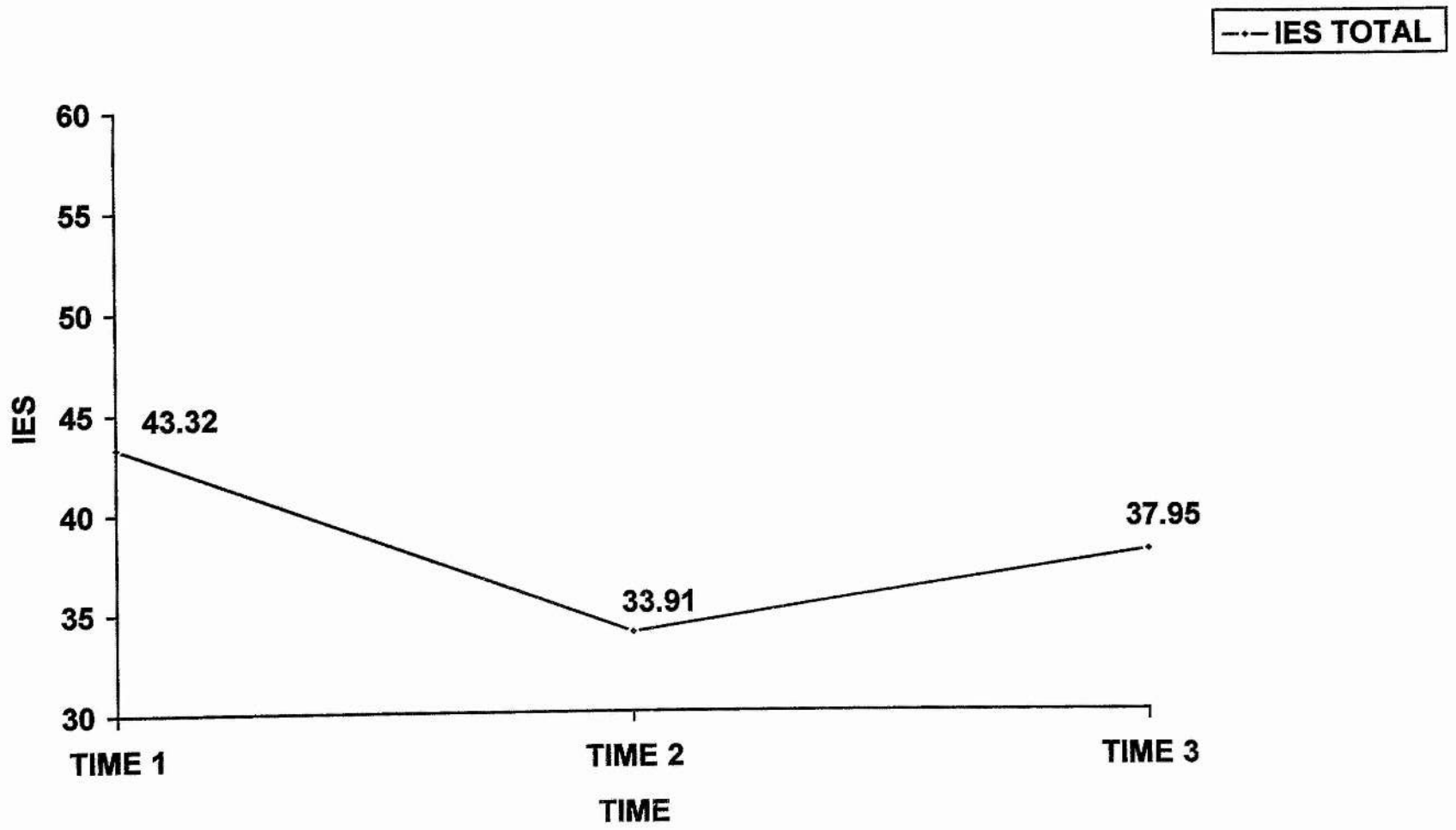


Figure 5.2. Mean Levels of IES Total Score at Time 1, Time 2 & Time 3

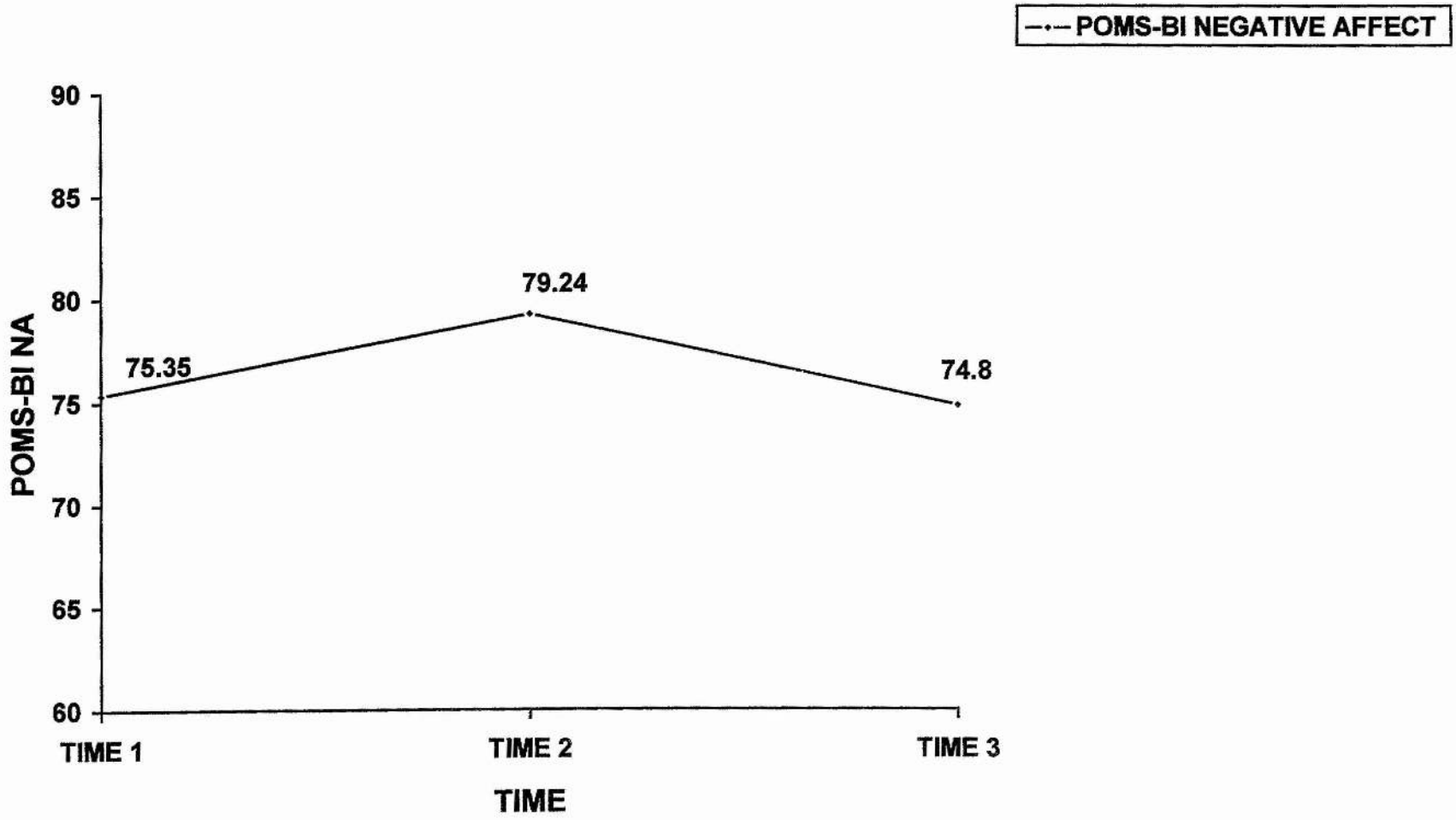


Figure 5.3. Mean Levels of POMS-BI Negative Affect Score at Time 1, Time 2 & Time 3

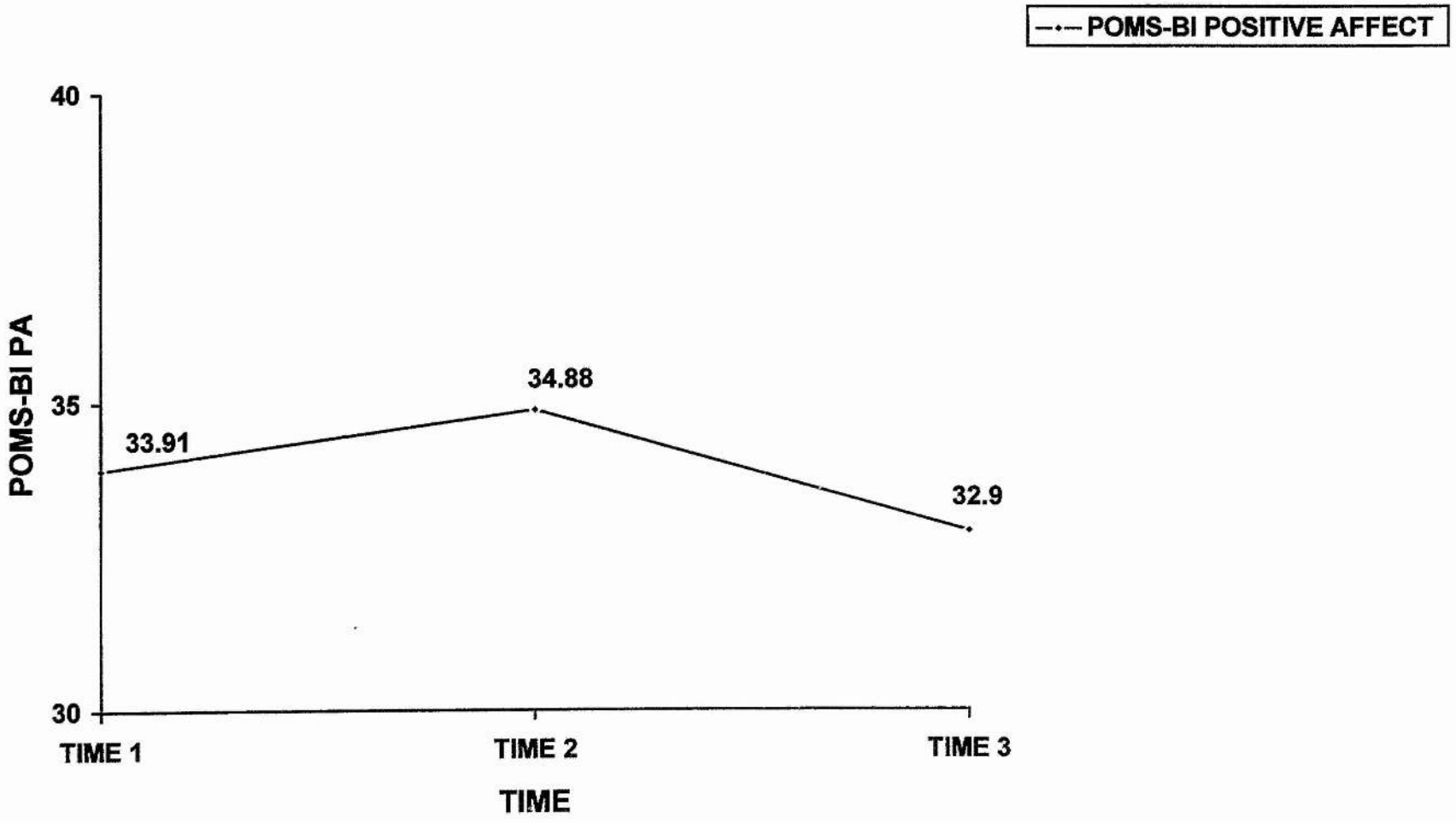


Figure 5.4. Mean Levels of POMS-BI Positive Affect Score at Time 1, Time 2 & Time 3

II. Replication of Time 1 Significant Results at Time 2 and Time 3

In order to ascertain whether the significant findings at Time 1 concerning the relationships between subject/crime characteristics, emotional state and event-related impact, attributions of blame and revenge remained significant at Time 2 and at Time 3, t-tests, Pearson's correlations and ANOVAs were conducted. The same analyses from Chapter 4, regarding these relationships, were carried out using the Time 2 data on emotional state and event-related impact (GHQ-28, POMS-BI & IES) and the Time 3 data on emotional state and event-related impact (GHQ-28, POMS-BI & IES), attributions of blame, and feelings of revenge. Relationships which were not significant after Bonferroni adjustments at Time 1 were not investigated to reduce the likelihood of chance findings due to Type I errors with one exception. The Time 1 pattern of relationships between self-blame and emotional state/event-related impact, in the context of the previous literature showing self-blame to be associated with poor adjustment in victims of rape (e.g., Frazier, 1990) suggested that these relationships should be investigated more closely to avoid the possibility of a Type II error. Therefore, this was examined less conservatively.

This section has been divided into two sections:

(1) Time 2 Replication
   a. relationships between subject/crime characteristics and emotional state and event-related impact

(2) Time 3 Replication
   a. relationships between subject/crime characteristics and emotional state and event-related impact
   b. relationships among attributions of blame and subject characteristics
   c. relationships among attributions of blame and emotional state and event-related impact
   d. relationships between revenge and emotional state and event-related impact

Time 2

Relationships Between Subject/Crime Characteristics and Emotional State and Event-Related Impact

At Time 1, age was correlated with the GHQ-28 somatic symptoms sub-scale, severe depression sub-scale and the total after the Bonferroni adjustment. At Time 2, age continued

to correlate with the GHQ-28 severe depression sub-scale ($r = .41$, $p < .05$ and the total ($r = .38$, $p < .05$), but not with the GHQ-28 somatic symptoms sub-scale($r = .31$, $p = .07$).

At Time 1, female subjects had higher scores on the POMS-BI negative affect and the IES intrusive thoughts sub-scale. In addition, female subjects scored lower (towards the negative mood state) on the POMS-BI composed/anxious sub-scale, agreeable/hostile sub-scale, elated/depressed sub-scale, confident/unsure sub-scale and the clearheaded/confused sub-scale. At Time 2, five of the significant Time 1 results were replicated. At Time 2, female subjects continued to have higher scores than male subjects on the POMS-BI negative affect [$t(32) = -2.04$, $p < .05$] and the IES intrusive thoughts sub-scale [$t(32) = -3.17$, $p < .01$]. Further, female subjects had more negative scores (scoring towards the negative mood state) than male subjects on the POMS-BI composed/anxious sub-scale [$t(32) = 2.95$, $p < .01$], the POMS-BI agreeable/hostile sub-scale [$t(32) = 2.31$, $p < .05$] and the POMS-BI elated/depressed sub-scale [$t(32) = 2.06$, $p < .05$]. Two significant results from Time 1 concerned with gender failed to replicate at Time 2: POMS-BI confident/unsure sub-scale [$t(32) = 1.57$, $p = .13$] and the POMS-BI clearheaded/confused sub-scale [$t(32) = 1.31$, $p = .20$]. In addition, at Time 1, gender was correlated with the POMS-BI negative affect after a Bonferroni adjustment. At Time 2, this correlation remained significant ($r = .37$, $p < .05$).

At Time 1, support seeking subjects had higher scores on the GHQ-28 total, IES avoidance behaviours sub-scale, the IES intrusive thoughts sub-scale and the IES total. Further, support seeking subjects had higher levels of depression on the POMS-BI elated/depressed sub-scale. At Time 2, however, only one of the five significant results from Time 1 were replicated. At Time 2, support seeking subjects continued to have higher depression scores on the POMS-BI elated/depressed sub-scale [$t(32) = 2.20$, $p < .05$]. No significant differences between support and non-support seeking subjects were replicated on the GHQ-28 total [$t(32) = -1.09$, $p = .29$], the IES avoidance behaviours sub-scale [$t(32) = -.23$, $p = .82$], the IES intrusive thoughts sub-scale [$t(32) = -.65$, $p = .52$, and the IES total [$t(32) = -.49$, $p = .63$].

With regards to year of bereavement, subjects bereaved in 1994 had significantly lower positive affect as evidenced on the POMS-BI positive affect score than subjects bereaved in 1975 at Time 1. This finding was not replicated at Time 2, however, as no significant differences were observed between bereavement years on Time 2 POMS-BI positive affect [$F(5,28) = .90$, $p = .50$].

In summary, at Time 2 the older the subject the higher the depression; female subjects continued to experience increased anxiety, hostility, depression, intrusive thoughts and decreased negative affect compared with male subjects; and support seeking subjects continued to experience higher levels of depression than non-support seeking subjects.

Time 3

Relationships Between Subject/Crime Characteristics and Emotional State and Event-Related Impact

At Time 1, age was correlated with GHQ-28 somatic symptoms sub-scale, severe depression sub-scale and the total. The only result that was replicated at Time 3, however, was the GHQ-28 total ($r = .46$, $p < .05$). No replication regarding the correlation of age with GHQ-28 somatic symptoms sub-scale ($r = .41$, $p = .07$) or the GHQ-28 severe depression sub-scale ($r = .42$, $p = .06$) at Time 3 occurred.

At Time 1, female subjects had higher scores on the POMS-BI negative affect and the IES intrusive thoughts sub-scale. In addition, female subjects scored lower (towards the negative mood state) on the POMS-BI composed/anxious sub-scale, agreeable/hostile sub-scale, elated/depressed sub-scale, confident/unsure sub-scale and the clearheaded/confused sub-scale. At Time 3, only two of these relationships were replicated. Female subjects scored more negatively than men on the POMS-BI agreeable/hostile sub-scale [$t(18) = 2.40$, $p < .05$] and the POMS-BI elated/depressed sub-scale [$t(18) = 2.16$, $p < .05$]. No replications occurred on the POMS-BI composed/anxious sub-scale [$t(18) = 1.40$, $p = .19$], the POMS-BI confident/unsure sub-scale [$t(18) = 1.83$, $p = .08$], POMS-BI clearheaded/confused sub-scale [$t(18) = 1.18$, $p = .26$], the POMS-BI negative affect [$t(18) = -1.81$, $p = .09$] and the IES intrusive thoughts sub-scale [$t(18) = -1.58$, $p = .13$]. Further, gender was correlated with POMS-BI negative affect at Time 1 after the Bonferroni adjustment, but this relationship did not replicate at Time 3 ($r = .39$, $p = .09$).

Support seeking subjects had higher scores on the GHQ-28 total, the IES avoidance behaviours sub-scale, the IES intrusive thoughts sub-scale, and the IES total. In addition, they had increased depression on the POMS-BI elated/depressed sub-scale than non-support seeking subjects. At Time 3, all of these relationships replicated. Support seeking subjects continued to have higher scores on the GHQ-28 total [$t(18) = -3.17$, $p < .01$], the IES

avoidance behaviours sub-scale [$t(18) = -2.59$, $p < .05$], the IES intrusive thoughts sub-scale [$t(18) = -4.02$, $p < .001$] and the IES total [$t(18) = -4.03$, $p < .001$]. Further support seeking subjects had more depression than non-support seeking subjects as evidenced on the POMS-BI elated/depressed sub-scale [$t(18) = 2.91$, $p < .01$.].

Subjects bereaved in 1994 had lower levels of positive affect on the POMS-BI positive affect score than subjects bereaved in 1975 at Time 1. This relationship did not replicate at Time 3. No significant results were obtained between bereavement years on the POMS-BI positive affect at Time 3.

In summary, at Time 3, the older the subject the more negative emotional state; female subjects continued to experience increased hostility and depression; and support seeking subjects continued to experience increased negative emotional state, depression, avoidance behaviours and intrusive thoughts than non-support seeking subjects

Relationships Among Attributions of Blame and Subject Characteristics

At Time 1, female subjects had higher levels of self-blame attributions than male subjects. At Time 3, however, this result did not replicate. Female subjects were not reporting significantly higher levels of self-blame attributions than male subjects [$t(17) = -1.45$, $p = .17$].

At Time 1, the number of attributions made by subjects was correlated with the level of self-blame and the level of environmental blame after the Bonferroni adjustment. At Time 3, only the correlation with the level of environmental blame replicated ($r = .65$, $p < .01$). Number of attributions made and the level of self-blame was not correlated at Time 3 ($r = -.07$, $p = .79$).

In addition to the correlation with the number of attributions made, level of environmental blame was correlated with the level of other-blame at Time 1 after the Bonferroni adjustment. This relationships did not replicate at Time 3 ($r = -.30$, $p = .21$).

Finally, at Time 1, level of chance blame and level of society blame were significantly correlated after the Bonferroni adjustment. At Time 3, however, this correlation was not replicated ($r = .05$, $p = .84$).

In summary, in terms of the relationships between subject characteristics and attributions of blame, the only replication of Time 1 significant results that occurred at Time 3 was the correlation between the number of attributions made and the level of environmental

blame. The more attributions of blame made, the higher the level of environmental blame and vice versa.

Relationships Among Attributions of Blame and Emotional State and Event-Related Impact

At Time 1, level of self-blame attributions was correlated with the GHQ-28 somatic symptoms sub-scale, GHQ-28 anxiety/insomnia sub-scale, GHQ-28 severe depression sub-scale, the GHQ-28 total, the IES avoidance behaviours sub-scale, the IES intrusive thoughts sub-scale and the IES total, the POMS-BI negative affect score, POMS-BI composed/anxious sub-scale, POMS-BI elated/depressed sub-scale and the POMS-BI clearheaded/confused sub-scale before the Bonferroni adjustment. At Time 3, however, only two correlations remained significant. Level of self-blame was correlated with GHQ-28 somatic symptoms sub-scale ($r = .45$, $p < .05$) and the POMS-BI negative affect ($r = .45$, $p < .05$). Higher levels of self-blame were related to higher levels of somatic symptoms and higher levels of negative affect. Level of self-blame was not correlated with GHQ-28 anxiety/insomnia sub-scale ($r = .18$, $p = .46$), GHQ-28 severe depression sub-scale ($r = .29$, $p = .22$), GHQ-28 total ($r = .33$, $p = .16$), the IES avoidance behaviours sub-scale ($r = .25$, $p = .30$), the IES intrusive thoughts sub-scale ($r = .31$, $p = .20$), the IES total ($r = .32$, $p = .18$), POMS-BI composed/anxious sub-scale ($r = -.37$, $p = .12$), the POMS-BI elated/depressed sub-scale ($r = -.42$, $p = .07$) and the POMS-BI clearheaded/confused sub-scale ($r = -.41$, $p = .08$).

At Time 1, level of society blame was correlated with the GHQ-28 anxiety/insomnia sub-scale after the Bonferroni adjustment. This correlation was not replicated at Time 3 ($r = .34$, $p = .15$).

In summary, only two of the significant relationships between level of self-blame and emotional state and event-related impact found at Time 1 were replicated at Time 3. No replication at Time 3 was found between level of society blame and emotional state and event-related impact.

Relationships Between Revenge and Emotional State and Event-Related Impact

At Time 1, subjects with feelings of revenge had higher scores on the GHQ-28 somatic symptoms sub-scale, the GHQ-28 anxiety/insomnia sub-scale, the GHQ-28 severe depression sub-scale, the GHQ-28 total and the IES intrusive thought sub-scale. In addition, subjects

with feelings of revenge had lower scores on the POMS-BI confident/unsure sub-scale and feelings of revenge were correlated with the GHQ-28 somatic symptoms sub-scale after the Bonferroni adjustment. At Time 3, the only replicated significant finding from Time 1 was that subjects with feelings of revenge scored significantly higher than subjects without feelings of revenge on the IES intrusive thoughts sub-scale [$t(17) = -2.19$, $p < .05$]. No replication occurred on the GHQ-28 somatic symptoms sub-scale [$t(17) = -1.09$, p .29], the GHQ-28 anxiety/insomnia sub-scale [$t(17) = -1.28$, $p = .22$], the GHQ-28 severe depression sub-scale [$t(17) = -.85$, $p = .41$], the GHQ-28 total [$t(17) = -1.16$, $p = .26$], the POMS-BI confident/unsure sub-scale [$t(17) = .68$, $p = .50$] and the correlation with the GHQ-28 somatic symptoms sub-scale ($r = .26$, $p = .29$).

In summary, only one of the seven significant findings from Time 1 regarding feelings of revenge and emotional state and event-related impact was replicated at Time 3. Subjects with feelings of revenge continued to have increased levels of intrusive thoughts than subjects without feelings of revenge.

III. Prediction of Later Emotional State, Event-Related Impact and Overall Adjustment Outcome

In order to determine whether predictive relationships existed between demographic characteristics, Time 1 measures of emotional state and event-related impact, Time 1 attributions of blame and feelings of revenge, and Time 2 and Time 3 measures of emotional state and event-related impact, multiple regression analyses were conducted. These analyses consisted of three separate sections: (1) using Time 1 measures to predict Time 2/Time 3 levels of emotional state and event-related impact, (2) using Time 1 measures of emotional state and event-related impact to determine the best predictor of Time 2/Time 3 overall adjustment and (3) using other Time 1 measures and the best predictive measure from stage 2 to predict Time 2/Time 3 overall adjustment.

Time 1 → Time 2

Do Time 1 Variables (age, gender, emotional state and event-related impact, level of self-blame and feelings of revenge) Predict Time 2 Levels of Emotional State and Event-Related Impact?

In order to determine whether Time 1 variables (age, gender, emotional state and event-related impact, level of self-blame and feelings of revenge) predicted levels of emotional state and event-related impact at Time 2, five separate hierarchical multiple regression analyses were carried out. Each regression used a separate measure of emotional state and event-related impact as the dependent variable (GHQ-28 total, IES total, POMS-BI negative affect total, POMS-BI positive affect total and overall adjustment). In each of the five regression analyses, the first block of independent variables consisted of age and gender. The second block of independent variables was the Time 1 value of the measure to be predicted at Time 2. The third and final block of independent variables included Time 1 level of self-blame and presence/absence of feelings of revenge. Table 5.6 reports the significant and non-significant results (*F* value and its significance, beta weight, adjusted R^2, *t* value and its significance) for each of the five hierarchical regressions.

For the prediction of Time 2 GHQ-28 total, results indicated that the Time 1 GHQ-28 total (beta = .83, t = 5.45, $p < .00001$) and gender (beta = .23, t = 2.10, $p < .05$) were predictive of Time 2 GHQ-28 total. Higher Time 1 GHQ-28 total scores and being female were predictive of higher GHQ-28 total scores at Time 2. Age, level of self-blame and feelings of revenge did not add significantly to the prediction.

For the prediction of Time 2 IES total, results found that the Time 1 IES total (beta = .52, t = 3.20, $p < .01$) and gender (beta = .33, t = 2.56, $p < .05$) were predictive of Time 2 IES total. Higher Time 1 IES total scores and being female were predictive of higher IES total scores at Time 2. Age, level of self-blame and feelings of revenge did not add significantly to the prediction.

Results from the prediction of Time 2 POMS-BI negative affect found that only the Time 1 POMS-BI negative affect was predictive (beta = .62, t = 3.58, $p < .001$). Higher Time 1 POMS-BI negative affect scores were predictive of higher POMS-BI negative affect scores at Time 2. Age, gender, level of self-blame and feelings of revenge did not add significantly to the prediction.

Results from the prediction of Time 2 POMS-BI positive affect found that only the Time 1 POMS-BI positive affect was predictive (beta = .57, t = 3.31, p < .01). Higher Time 1 POMS-BI positive affect scores were predictive of higher POMS-BI positive affect scores at Time 2. Age, gender, level of self-blame and feelings of revenge did not add significantly to the prediction.

Results from the prediction of overall adjustment at Time 2 indicated that only overall adjustment at Time 1 was significantly predictive (beta = .78, t = 5.15, p < .01). Poorer overall adjustment at Time 1 was predictive of poorer adjustment at Time 2. Age, gender, level of self-blame and feelings of revenge did not significantly add to the prediction.

In summary, the Time 1 measures (GHQ-28, POMS-BI, IES & overall adjustment) predicted those measures at Time 2. In addition, female gender added to the prediction obtained from the initial values of GHQ-28 and IES at Time 2. Age, self-blame and revenge did not add significantly to the predictions of Time 2 measures of emotional state and event-related impact.

Table 5.6. Predicting Time 2 GHQ-28, IES, POMS-BI Negative Affect, POMS-BI Positive Affect and Overall Adjustment With Demographic Characteristics, Time 1 Measure Predicted at Time 2, Level of Self-Blame and Feelings of Revenge as Independent Variables.

Dependent Variable		Independent Variable	Final Beta	*t*	*p*
TIME 2 GHQ-28 TOTAL	Step 1	Age	-.05	-.40	.69
		Gender	.23	2.10	**.05**
	Step 2	Time 1 GHQ-28 Total	.83	5.45	**.00**
	Step 3	Level of Self-Blame	-.04	-.34	.74
		Revenge	-.01	-.13	.90
Cumulative Adjusted R^2 = .68 [F(5,28) = 15.19, p < .00001]					
TIME 2 IES TOTAL	Step 1	Age	-.19	-1.47	.15
		Gender	.33	2.56	**.02**
	Step 2	Time 1 IES Total	.52	3.20	**.003**
	Step 3	Level of Self-Blame	.13	.86	.40
		Revenge	.09	.71	.49
Cumulative Adjusted R^2 = .55 [F(5,28) = 9.19, p < 00001]					
TIME 2 POMS-BI Negative Affect (NA)	Step 1	Age	.16	1.21	.24
		Gender	-.02	-.13	.90
	Step 2	Time 1 POMS-BI NA	.62	3.58	**.001**
	Step 3	Level of Self-Blame	.19	1.33	.19
		Revenge	-.06	-.47	.65
Cumulative Adjusted R^2 = .53 [F(5,28) = 8.44, p < .00001]					
TIME 2 POMS-BI Positive Affect (PA)	Step 1	Age	.01	.07	.94
		Gender	-1.20	-.74	.47
	Step 2	Time 1 POMS-BI PA	.57	3.31	**.003**
	Step 3	Level of Self-Blame	-.09	-.57	.57
		Revenge	-.08	-.50	.62
Cumulative Adjusted R^2 = .36 [F(5,28) = 4.73, p < .01]					
TIME 2 Overall Adjustment	Step 1	Age	-.65	-.58	.57
		Gender	.16	1.49	.15
	Step 2	Time 1 Overall Adjustment	.78	5.15	**.00**
	Step 3	Level of Self-Blame	.08	.72	.48
		Revenge	-.01	-.10	.92
Cumulative Adjusted R^2 = .72 [F(5,28) = 18.07, p < .001]					

What Time 1 Measure of Emotional State and Event-Related Impact (GHQ-28, IES, POMS-BI NA, or POMS-BI PA) Best Predicts Time 2 Overall Adjustment?

In order to determine which Time 1 measure of emotional state and event-related impact best predicted Time 2 outcome, a step-wise multiple regression was carried out. Time 1 GHQ-28 total, IES total, POMS-BI negative affect and POMS-BI positive affect were used as independent variables with Time 2 overall adjustment as the dependent variable. Results indicated that the Time 1 GHQ-28 total was the best predictor of Time 2 overall adjustment (beta = .49, t = 3.64, p = .001, adjusted R^2 = .71, F = 42.15). Higher Time 1 GHQ-28 total scores were predictive of an increased negative outcome at Time 2.

Which Time 1 variable(s) (age, gender, GHQ-28 total, level of self-blame and feelings of revenge) Predict Time 2 Overall Adjustment?

A hierarchical multiple regression was carried out in order to determine which Time 1 variables (age, gender, GHQ-28 total, level of self-blame and feelings of revenge predicted the Time 2 overall adjustment. Age and gender were entered in the first block, followed by the Time 1 GHQ-28 total in the second block. The third and final block consisted of level of self-blame and the presence/absence of feelings of revenge. Time 2 overall adjustment was the dependent variable. Table 5.7 reports the significant and non-significant results (*F* value and its significance, beta weight, adjusted R^2, *t* value and its significance) for the hierarchical regression.

Results indicated that the Time 1 GHQ-28 total (beta = .74, t = 5.21, p < .000) and gender (beta = .33, t = 3.24, p < .01) were predictive of Time 2 overall adjustment. The higher the GHQ-28 total score, the more negative overall adjustment. Being female was predictive of a more negative overall adjustment than being male. Age, level of self-blame and feelings of revenge did not add significantly to the prediction of Time 2 overall adjustment.

Table 5.7. Predicting Time 2 Overall Adjustment With Demographic Characteristics, Best Time 1 Predictor Variable of Time 2 Overall Adjustment, Level of Self-Blame and Feelings of Revenge as Independent Variables.

Dependent Variable		Independent Variable	Final Beta	*t*	*p*
TIME 2 Overall Adjustment	Step 1	Age	-.08	-.73	.47
		Gender	.33	3.24	**.003**
	Step 2	Time 1 GHQ-28 Total	.74	5.21	**.00**
	Step 3	Level of Self-Blame	.04	.38	.70
		Revenge	.03	.31	.76
Cumulative Adjusted $R^2 = .72$ [$F(5,28) = 18.36$, $p < .00001$]					

Time 1 → Time 3

Do Time 1 Variables (age, gender, emotional state and event-related impact, level of self-blame and feelings of revenge) Predict Time 3 Levels of Emotional State and Event-Related Impact?

In order to determine whether Time 1 variables (age, gender, emotional state and event-related impact, level of self-blame and feelings of revenge) predicted levels of emotional state and event-related impact at Time 3, five separate hierarchical multiple regression analyses were carried out. Each regression used a separate measure of emotional state and event-related impact as the dependent variable (GHQ-28 total, IES total, POMS-BI negative affect total, POMS-BI positive affect total and Overall Adjustment). In each of the five regression analyses, the first block of independent variables consisted of age and gender. The second block of independent variables was the Time 1 value of the measure to be predicted at Time 3. The third and final block of independent variables included Time 1 level of self-blame and the presence/absence of feelings of revenge. Table 5.8 reports the significant and non-significant results (*F* value and its significance, beta weight, adjusted R^2, *t* value and its significance) for each of the five hierarchical regressions.

For the prediction of Time 3 GHQ-28 total, results indicated that the Time 1 GHQ-28 total (beta = .63, t = 2.97, $p < .01$) and level of self-blame (beta = .46, t = 2.50, $p < .05$) were

Table 5.8. Predicting Time 3 GHQ-28, IES, POMS-BI Negative Affect, POMS-BI Positive Affect and Overall Adjustment With Demographic Characteristics, Time 1 Measure Predicted at Time 3, Level of Self-Blame and Feelings of Revenge as Independent Variables.

Dependent Variable		Independent Variable	Final Beta	*t*	*p*
TIME 3 GHQ-28 TOTAL	Step 1	Age	.04	.24	.82
		Gender	-.25	-1.49	.16
	Step 2	Time 1 GHQ-28 Total	.63	2.97	**.01**
	Step 3	Level of Self-Blame	.46	2.50	**.03**
		Revenge	-.03	1.35	.20
Cumulative Adjusted $R^2 = .68$ [$F(5,14) = 9.16$, $p < .001$]					
TIME 3 IES TOTAL	Step 1	Age	.32	2.10	**.05**
		Gender	.23	1.81	.09
	Step 2	Time 1 IES Total	.48	2.57	**.02**
	Step 3	Level of Self-Blame	.17	1.08	.30
		Revenge	.08	.71	.49
Cumulative Adjusted $R^2 = .81$ [$F(5,14) = 17.28$, $p < 0000$]					
TIME 3 POMS-BI Negative Affect (NA)	Step 1	Age	.26	1.30	.21
		Gender	-.17	-.61	.55
	Step 2	Time 1 POMS-BI NA	.56	2.03	.06
	Step 3	Level of Self-Blame	.27	1.18	.26
		Revenge	-.16	-.87	.40
Cumulative Adjusted $R^2 = .43$ [$F(5,14) = 3.85$, $p < .05$]					
TIME 3 POMS-BI Positive Affect (PA)	Step 1	Age	.07	.37	.72
		Gender	-.07	-.31	.76
	Step 2	Time 1 POMS-BI PA	.75	3.50	**.004**
	Step 3	Level of Self-Blame	-.06	-.29	.78
		Revenge	.05	.28	.79
Cumulative Adjusted $R^2 = .47$ [$F(5,14) = 4.35$, $p < .01$]					
TIME 3 Overall Adjustment	Step 1	Age	.09	.62	.55
		Gender	-.09	-.56	.58
	Step 2	Time 1 Overall Adjustment	.76	3.98	**.001**
	Step 3	Level of Self-Blame	.25	1.72	.11
		Revenge	-.09	-.74	.47
Cumulative Adjusted $R^2 = .78$ [$F(5,14) = 14.37$, $p < .001$]					

predictive of Time 3 GHQ-28 total. Higher Time 1 GHQ-28 total score and levels of self-blame were predictive of higher GHQ-28 total scores at Time 3. Age, gender and feelings of revenge did not add significantly.

For the prediction of Time 3 IES total, it was found that the Time 1 IES total (beta = .48, $t = 2.57$, $p < .05$) and age (beta = .32, $t = 2.10$, $p < .05$) were predictive of Time 3 IES total. Higher Time 1 IES scores and being older were predictive of higher IES total scores at Time 3. Gender, level of self-blame and feelings of revenge did not add significantly.

Results from the prediction of Time 3 POMS-BI negative affect indicated that none of the Time 1 independent variables were predictors of Time 3 POMS-BI negative affect.

Results from the Time 3 POMS-BI positive affect regression indicated that only the Time 1 POMS-BI positive affect was predictive (beta = .75, $t = 3.50$, $p < .01$). Higher Time 1 POMS-BI positive affect scores were predictive of higher POMS-BI positive affect scores at Time 3. Age, gender, level of self-blame and feelings of revenge did not add significantly.

Results from the prediction of Time 3 overall adjustment suggested that only the overall adjustment at Time 1 was significantly predictive (beta = .76, $p < .001$). Poorer overall adjustment at Time 1 was predictive of poorer adjustment at Time 3. Age, gender, level of self-blame and feelings of revenge did not add significantly.

In summary, Time 1 measures (GHQ-28, POMS-BI, IES & Overall Adjustment) predicted those measures at Time 3, except for the POMS-BI negative affect (although approaching significance at $p = .06$). Self-blame predicted GHQ-28 total at Time 3 and age predicted IES total at Time 3. Gender (as in six month predictions) and revenge did not add significantly to the prediction of emotional state and event-related impact at twelve months post-interview.

What Time 1 Measure of Emotional State and Event-Related Impact (GHQ-28, IES, POMS-BI NA or POMS-BI PA) Best Predicts Time 3 Overall Adjustment?

In order to ascertain which Time 1 measure of emotional state and event-related impact best predicted Time 3 overall adjustment, a step-wise multiple regression was carried out. Time 1 GHQ-28 total, IES total, POMS-BI negative affect and POMS-BI positive affect were used as independent variables with Time 3 overall adjustment as the dependent variable. Results indicated that the Time 1 GHQ-28 total was the best predictor of Time 3 overall

adjustment (beta = .63, t = 4.44, p < .001, adjusted R^2 = .76, F = 31.06). Higher Time 1 GHQ-28 total scores were predictive of an increased negative overall adjustment at Time 3.

Which Time 1 Variable(s) (age, gender, GHQ-28 total, level of self-blame and feelings of revenge) Predict Time 3 Overall Adjustment?

A hierarchical multiple regression was carried out in order to identify which Time 1 variables (age, gender, GHQ-28 total., level of self-blame and feelings of revenge) predicted the Time 3 overall adjustment. Age and gender were entered in the first block, followed by the Time 1 GHQ-28 total in the second block. The third and final block consisted of Time 1 level of self-blame and the presence/absence of feelings of revenge. Time 3 overall adjustment was the dependent variable. Table 5.9 reports the significant and non-significant results (*F* value and its significance, beta weight, adjusted R^2, *t* value and its significance) for the hierarchical regression

Results indicated that only the Time 1 GHQ-28 total (beta = .62, t = 3.17, p < .01) was predictive of Time 3 overall adjustment. The higher the GHQ-28 total score at Time 1, the more negative overall adjustment at Time 3. Age, gender, level of self-blame and feelings of revenge did not add significantly to the prediction.

Table 5.9. Predicting Time 3 Overall Adjustment With Demographic Characteristics, Best Time 1 Predictor Variable of Time 3 Outcome, Level of Self-Blame and Feelings of Revenge as Independent Variables.

Dependent Variable		Independent Variable	Final Beta	*t*	*p*
TIME 3 Overall Adjustment	Step 1	Age	.16	1.04	.32
		Gender	.15	.95	.36
	Step 2	Time 1 GHQ-28 Total	.62	3.17	**.01**
	Step 3	Level of Self-Blame	.19	1.12	.28
		Revenge	-.06	-.39	.70
Cumulative Adjusted R^2 = .73 [F(5,14) = 11.05, p < .0001]					

In summary, GHQ-28 scores at Time 1 and gender were predictors of Time 2 overall adjustment. At Time 3, only the GHQ-28 total score was predictive of overall adjustment. The GHQ-28 total score appeared to be a strong predictor of overall adjustment at six and twelve months post-interview. High Time 1 GHQ-28 total scores predicted poor overall adjustment at six and twelve months.

IV. Disabling Distress

In order to ascertain whether differences emerged between subjects who were experiencing disabling distress and those subjects who were not experiencing disabling distress, t-test analyses were carried out on Time 3 data on participants who met the criterion for disabling distress (GHQ-28 cases plus the three non-participants who were too distressed to participate) and participants who did not meet the criterion for disabling distress (GHQ-28 non-cases) on Time 1, Time 2 and Time 3 measures of emotional state and event-related impact, attributions of blame and control cognitions. This investigated:

Comparisons of Time 3 Disabling Distress (yes/no)

a. differences on Time 1 measures of emotional state and event-related impact, overall adjustment, attributions of blame and control cognitions
b. differences on Time 2 measures of emotional state and event-related impact and overall adjustment
c. differences on Time 3 measures of emotional state and event-related impact, overall adjustment, attributions of blame and control cognitions

Time 3 Disabling Distress (Yes/No)

Differences Between Time 3 Disabling Distress Cases and Non-Cases on Time 1 Measures of Emotional State and Event-Related Impact, Overall Adjustment, Attributions of Blame and Control Cognitions

Means, standard deviations and *t* and *p* values for Time 1 measures of emotional state and even-related impact, overall adjustment, attributions of blame and control cognitions for the comparison of Time 3 participants disabled by distress and participants not disabled by distress are presented in Table 5.10. T-tests found significant differences between those

disabled and not disabled by distress on eleven of the sixteen measures of emotional state and event-related impact. Subjects disabled by distress scored significantly higher than subjects not disabled by distress on the GHQ-28 somatic symptoms sub-scale [$t(21) = -4.21$, $p < .000$], the GHQ-28 anxiety/insomnia sub-scale [$t(21) = -4.37$, $p < .000$], the GHQ-28 social dysfunction sub-scale [$t(21) = -3.60$, $p < .01$], the GHQ-28 total [$t(21) = -3.29$, $p < .01$] and the POMS-BI negative affect [$t(21) = -2.40$, $p < .05$]. Participants disabled by distress scored significantly lower[2] than those not disabled by distress on the POMS-BI positive affect [$t(21) = 2.75$, $p < .01$], the POMS-BI composed/anxious sub-scale [$t(21) = 2.49$, $p < .05$], the POMS-BI elated/depressed sub-scale [$t(21) = 3.49$, $p < .01$], the POMS-BI confident/unsure sub-scale [$t(21) = 2.54$, $p < .05$] and the POMS-BI clearheaded/confused sub-scale [$t(21) = 2.64$, $p < .05$]. No significant differences were found between disabling distress cases and non-cases on the IES intrusion sub-scale, the IES avoidance sub-scale, the IES total, the POMS-BI agreeable/hostile sub-scale and the POMS-BI energetic/tired sub-scale. A significant difference emerged between those disabled and not disabled by distress on overall adjustment. Subjects classified as disabled by distress had poorer overall adjustment at Time 1 than those classified as not suffering from disabling distress. A trend emerged in the results in that subjects who met the criterion for disabling distress always scored in a more negative manner than subjects who did not meet the criterion for disabling distress, whether significant or not.

T-tests found only one significant difference between disabling distress cases and non disabling distress cases on attributions of blame and control cognitions at Time 1. Disabling distress cases had significantly higher levels of self-blame than non-cases [$t(21) = -2.81$, $p < .01$]. No differences were found on the number of attributions made, level of chance blame, level of environmental blame, level of other blame, level of societal blame, level of victim blame, level of past control or level of future control.

[2] For the POMS-BI sub-scales, the lower score indicates the negative mood.

Table 5.10. Comparison of Time 1 GHQ-28, POMS-BI, IES, Overall Adjustment, Attributions of Blame and Control Cognitions for Participants Who Met Disabling Distress Caseness Criterion and Participants Who Did Not Meet Disabling Distress Caseness Criterion at Time 3: Means, Standard Deviations and *t* and *p* Values

	Case (n = 12)	Non-Case (n = 11)	*t*(21)	*p*
(1) GHQ-28 Somatic Symptoms	13.83 (4.61)	7.18 (2.60)	-4.21	.000
(2) GHQ-28 Anxiety/Insomnia	14.67 (4.01)	8.36 (2.73)	-4.37	.000
(3) GHQ-28 Social Dysfunction	14.67 (4.87)	8.45 (3.14)	-3.60	.01
(4) GHQ-28 Severe Depression	11.83 (5.77)	5.64 (2.50)	-3.29	.01
(5) GHQ-28 Total	55.00 (15.434)	29.64 (8.03)	-4.87	.000
(6) POMS-BI Negative Affect	84.58 (18.75)	62.55 (25.12)	-2.40	.05
(7) POMS-BI Positive Affect	22.58 (14.79)	46.73 (26.18)	2.75	.01
(8) POMS-BI Composed/Anxious	6.67 (6.17)	15.00 (9.65)	2.49	.05
(9) POMS-BI Agreeable/Hostile	11.58 (6.61)	16.91 (6.52)	1.94	ns
(10) POMS-BI Elated/Depressed	4.17 (4.63)	13.82 (8.29)	3.49	.01
(11) POMS-BI Confident/Unsure	8.17 (7.47)	16.73 (8.71)	2.54	.05
(12) POMS-BI Energetic/Tired	6.75 (6.88)	10.91 (7.96)	1.34	ns
(13) POMS-BI Clearheaded/Confused	8.83 (7.58)	18.82 (10.45)	2.64	.05
(14) IES Intrusion	26.17 (9.34)	20.82 (9.21)	-1.38	ns
(15) IES Avoidance	19.50 (12.82)	12.00 (8.15)	-1.66	ns
(16) IES Total	45.67 (19.98)	32.82 (15.17)	-1.72	ns
(17) Overall Adjustment	.39 (.62)	-.65 (.71)	-3.74	.001
(18) Number of Attributions Made	3.33 (.99)	2.82 (.87)	-1.32	ns
(19) Level of Chance Blame	3.50 (2.32)	3.73 (2.37)	.23	ns
(20) Level of Environmental Blame	2.75 (2.42)	2.45 (1.75)	-.33	ns
(21) Level of Other Blame	5.67 (.78)	6.00 (.00)	1.42	ns
(22) Level of Self Blame	3.83 (2.52)	1.55 (1.21)	-2.73	.01
(23) Level of Societal Blame	3.92 (2.43)	2.27 (1.68)	-1.87	ns
(24) Level of Victim Blame	1.17 (.58)	1.00 (.00)	-.96	ns
(25) Level of Past Control	3.33 (.99)	2.82 (.87)	-1.32	ns
(26) Level of Future Control	1.17 (.40)	1.64 (1.03)	1.48	ns

Differences Between Time 3 Disabling Distress Cases and Non-Cases on Time 2 Measures of Emotional State and Event-Related Impact and Overall Adjustment

Means, standard deviations and *t* and *p* values for Time 2 measures of emotional state and event-related impact for the comparison of Time 3 disabling distress cases and non-cases are presented in Table 5.11. T-tests found significant differences between Time 3 disabling distress cases and non-cases on ten of the sixteen measures of emotional state and event-related impact. Disabling distress cases scored significantly higher than non-cases on the GHQ-28 somatic symptoms sub-scale [$t(21) = -2.77$, $p < .01$], the GHQ-28 anxiety/insomnia sub-scale [$t(21) = -3.00$, $p < .01$], the GHQ-28 social dysfunction sub-scale [$t(21) = -3.55$, $p < .01$], the GHQ-28 severe depression sub-scale [$t(21) = -3.42$, $p < .01$], the GHQ-28 total [$t(21) = -4.06$, $p < ..001$] and the POMS-BI negative affect [$t(21) = -2.92$, $p < .01$]. Disabling distress cases scored significantly lower[3] than non-cases on the POMS-BI positive affect [$t(21) = 2.54$, $p < .05$], the POMS-BI composed/anxious sub-scale [$t(21) = 3.30$, $p < .01$], the POMS-BI confident/unsure sub-scale [$t(21) = 2.32$, $p < .05$] and the POMS-BI clearheaded/confused sub-scale [$t(21) = 4.25$, $p < .000$]. No significant differences were found between disabling distress cases and non-cases on the IES intrusions sub-scale, the IES avoidance sub-scale, the IES total, the POMS-BI agreeable/hostile sub-scale, the POMS-BI elated/depressed sub-scale and the POMS-BI energetic/tired sub-scale. A significant difference emerged between disabling distress cases and non-cases on overall adjustment. Disabling distress cases had poorer overall adjustment at Time 2 than non-cases. A trend emerged in the results in that subjects who met the criterion for disabling distress caseness always scored in a more negative manner than subjects who did not meet the criterion for disabling distress caseness, whether significant or not.

Differences Between Time 3 GHQ-28 Cases and Non-Cases on Time 3 Measures of Emotional State and Event-Related Impact, Attributions of Blame and Control Cognitions

Means, standard deviations and *t* and *p* values for Time 3 measures of emotional state and event-related impact, overall adjustment, attributions of blame and control cognitions for

[3] For the POMS-BI sub-scales, the lower score indicates the negative mood

Table 5.11. Comparison of Time 2 GHQ-28, POMS-BI, IES & Overall Adjustment for Participants Who Met Disabling Distress Caseness Criterion and Participants Who Did Not Meet Disabling Distress Caseness Criterion at Time 3: Means, Standard Deviations and *t* and *p* Values

	Case (n = 12)	Non-Case (n = 11)	*t*(21)	*p*
(1) GHQ-28 Somatic Symptoms	12.25 (4.16)	7.73 (3.64)	-2.77	.01
(2) GHQ-28 Anxiety/Insomnia	14.58 (4.36)	9.09 (4.42)	-3.00	.01
(3) GHQ-28 Social Dysfunction	15.08 (3.80)	9.27 (4.05)	-3.55	.01
(4) GHQ-28 Severe Depression	12.33 (5.45)	5.45 (4.01)	-3.42	.01
(5) GHQ-28 Total	54.25 (14.62)	31.55 (11.89)	-4.06	.001
(6) POMS-BI Negative Affect	86.08 (16.41)	66.64 (15.39)	-2.92	.01
(7) POMS-BI Positive Affect	27.92 (13.81)	45.09 (18.49)	2.54	.05
(8) POMS-BI Composed/Anxious	5.92 (3.92)	12.82 (5.98)	3.30	.01
(9) POMS-BI Agreeable/Hostile	11.00 (4.82)	14.36 (4.25)	1.77	ns
(10) POMS-BI Elated/Depressed	7.00 (6.40)	12.00 (6.62)	1.84	ns
(11) POMS-BI Confident/Unsure	9.25 (5.82)	15.27 (6.64)	2.32	.05
(12) POMS-BI Energetic/Tired	7.17 (5.81)	11.91 (7.06)	1.76	ns
(13) POMS-BI Clearheaded/Confused	9.50 (5.67)	19.91(6.09)	4.25	.000
14) IES Intrusion	18.83 (7.87)	15.09 (8.40)	-1.10	ns
(15) IES Avoidance	13.50 (8.22)	7.55 (6.01)	-1.97	ns
(16) IES Total	32.33 (13.84)	22.64 (11.95)	-1.79	ns
(17) Overall Adjustment	.28 (.48)	-64 (.59)	-4.16	.000

the comparison of Time 3 GHQ-28 cases and non-cases are presented in Table 5.12. T-tests found significant differences between GHQ-28 cases and non-cases on nine of the sixteen measures of emotional state and event-related impact. GHQ-28 cases scored significantly higher than non-cases on the GHQ-28 somatic symptoms sub-scale [$t(18) = -4.53$, $p < .000$], the GHQ-28 anxiety/insomnia sub-scale [$t(18) = -3.73$, $p < .01$], the GHQ-28 social dysfunction sub-scale [$t(18) = -5.86$, $p < .000$], the GHQ-28 severe depression sub-scale [$t(18) = -4.09$, $p < .001$], the GHQ-28 total [$t(18) = -6.77$, $p < .000$], the IES intrusion sub-

Table 5.12. Comparison of Time 3 GHQ-28, POMS-BI, IES, Overall Adjustment, Attributions of Blame and Control Cognitions for Participants Who Met GHQ-28 Caseness Criterion and Participants Who Did Not Meet GHQ-28 Caseness Criterion at Time 3: Means, Standard Deviations and *t* and *p* Values

	GHQ Case (n = 9)	GHQ Non-Case (n = 11)	*t*(18)	*p*
(1) GHQ-28 Somatic Symptoms	12.22 (2.82)	5.64 (3.53)	-4.53	.000
(2) GHQ-28 Anxiety/Insomnia	13.78 (4.38)	7.91 (2.59)	-3.73	.01
(3) GHQ-28 Social Dysfunction	14.33 (2.35)	7.91 (2.51)	-5.86	.000
(4) GHQ-28 Severe Depression	13.11 (5.51)	5.27 (2.90)	-4.09	.001
(5) GHQ-28 Total	53.44 (9.48)	26.73 (8.17)	-6.77	.000
(6) POMS-BI Negative Affect	83.44 (17.92)	67.73 (19.30)	-1.87	ns
(7) POMS-BI Positive Affect	25.22 (13.33)	39.18 (23.40)	1.59	ns
(8) POMS-BI Composed/Anxious	6.67 (5.15)	13.00 (7.60)	2.13	.05
(9) POMS-BI Agreeable/Hostile	12.22 (3.35)	15.18 (5.74)	1.36	ns
(10) POMS-BI Elated/Depressed	6.00 (5.81)	10.82 (8.65)	1.43	ns
(11) POMS-BI Confident/Unsure	7.78 (6.83)	14.00 (7.66)	1.90	ns
(12) POMS-BI Energetic/Tired	5.44 (5.41)	9.64 (7.76)	1.37	ns
(13) POMS-BI Clearheaded/Confused	11.89 (5.28)	16.82 (7.21)	1.71	ns
(14) IES Intrusion	28.00 (5.77)	18.82 (7.25)	-3.08	.01
(15) IES Avoidance	20.56 (10.00)	10.45 (5.61)	-2.86	.01
(16) IES Total	48.56 (11.60)	29.27 (11.58)	-3.70	.01
(17) Overall Adjustment	.61 (.54)	-.50 (.67)	-4.01	.001
	GHQ Case (n = 8)	GHQ Non-Case (n = 11)	*t*(17)	*p*
(18) Number of Attributions Made	4.11 (1.27)	3.50 (1.08)	-1.13	ns
(19) Level of Chance Blame	3.56 (2.07)	2.70 (1.83)	-.96	ns
(20) Level of Environmental Blame	3.44 (1.88)	2.40 (1.43)	-1.37	ns
(21) Level of Other Blame	5.67 (1.00)	6.00 (.00)	1.00	ns
(22) Level of Self Blame	2.89 (1.76)	1.60 (1.08)	-1.95	ns
(23) Level of Societal Blame	4.67 (1.73)	4.80 (1.23)	.20	ns
(24) Level of Victim Blame	1.33 (.71)	1.00 (.00)	-1.50	ns
(25) Level of Past Control	2.00 (1.41)	1.40 (.84)	-1.14	ns
(26) Level of Future Control	1.89 (.93)	1.60 (.97)	-.66	ns

scale [$t(18) = -3.08$, $p < .01$], the IES avoidance sub-scale [$t(18) = -2.86$, $p < .01$] and the IES total [$t(18) = -3.70$, $p < .01$]. GHQ-28 cases scored significantly lower[4] than non-cases on the POMS-BI composed/anxious sub-scale [$t(18) = 2.13$, $p < .05$]. No significant differences were found between GHQ-28 cases and non-cases on the POMS-BI negative affect, the POMS-BI positive affect, the POMS-BI agreeable/hostile sub-scale, the POMS-BI elated/depressed sub-scale, the POMS-BI confident/unsure sub-scale, the POMS-BI energetic/tired sub-scale and the POMS-BI clearheaded/confused sub-scale. A significant difference emerged between GHQ-28 cases and non-cases on overall adjustment. GHQ-28 cases had poorer overall adjustment at Time 3 than GHQ-28 non-cases. A trend emerged in the results in that subjects who met the criterion for GHQ-28 caseness always scored in a more negative manner than subjects who did not meet the criterion for GHQ-28 caseness, whether significant or not.

T-tests found no significant differences between GHQ-28 cases and non-cases on the number of blame attributions made, level of chance blame, level of environmental blame, level of other blame, level of self blame, level of societal blame, level of victim blame, level of past control or level of future control.

In summary, subjects who were classified as experiencing disabling distress at Time 3 were suffering more somatic symptoms, anxiety and insomnia, social dysfunction, severe depression, unsuredness, and confusion at Time 1, Time 2 and Time 3. In addition, these subjects had increased negative affect and decreased positive affect at Time 1 and Time 2. Further, they had higher levels of self-blame at Time 1. Specifically at Time 3, subjects who met GHQ-28 caseness criterion had increased intrusive thoughts and avoidance behaviours than subjects who did not meet GHQ-28 caseness criterion. Moreover, a directional trend emerged in that subjects who experienced disabling distress scored in a more negative manner on all the measures of emotional stated and event-related impact at Time 1, Time 2 and Time 3, whether results were significant or not. Furthermore, subjects who were disabled by their distress and met GHQ-28 caseness criterion had poorer overall adjustment at Time 1, Time 2 and Time 3.

[4] For the POMS-BI sub-scales, the lower score indicates the negative mood

Time 3 Participants vs. Non-Responders

Differences Between Time 3 Participants and Non-Responders on Time 1 & Time 2 Emotional State and Event-Related Impact and Overall Adjustment

Analyses were carried out in order to determine whether differences emerged between subjects who participated at Time 3 and subjects who did not respond at Time 3 on Time 1 and Time 2 measures of emotional state and event-related impact. Means, standard deviations and *t* and *p* values for Time 1 and Time 2 measures of emotional state and event-related impact for the comparison of Time 3 participants and non-responders are presented in Table 5.13. Results for Time 1 measures found only one significant difference between Time 3 participants and non-responders. The GHQ-28 anxiety/insomnia sub-scale showed that Time 3 non-responders had higher levels of anxiety and insomnia than Time 3 participants [$t(29) = 2.09$, $p < .05$]. No significant difference was found on overall adjustment at Time 2 between Time 3 participants and non-responders. Although no other significant differences emerged, a trend was found in that non-responders at Time 3 scored in a more negative manner on all the measures of emotional state and event-related impact, whether significant or not.

Results for Time 2 measures found four significant differences between Time 3 participants and non-responders. Non-responders had higher scores than participants on the GHQ-28 severe depression sub-scale [$t(29) = 2.09$, $p < .05$], the IES intrusion sub-scale [$t(29) = 2.47$, $p < .05$], the IES avoidance sub-scale [$t(29) = 3.22$, $p < .01$] and the IES total [$t(29) = 2.70$, $p < .05$]. No other significant differences emerged. A trend appeared in that Time 3 non-responders scored in a more negative manner on all of the measures of emotional state and event-related impact whether significant or not.

Overall, subjects who were non-responders at Time 3 had significantly higher levels of anxiety and insomnia at Time 1 and significantly higher levels of severe depression, intrusive thoughts and avoidance behaviours at Time 2 than subjects who participated at Time 3. No differences occurred, however, on overall adjustment at Time 1 and Time 2 between Time 3 participants and non-responders in that neither group had better nor poorer overall adjustment.

Table 5.13. Means, Standard Deviations and *t* and *p* Values of Time 3 Participants and Non-Responders on Time 1 & Time 2 GHQ-28, POMS-BI, IES & Overall Adjustment

	TIME 1				TIME 2			
	Participants (n = 20)	Non-Responders (n = 11)	*t(29)*	*p*	Participants (n = 20)	Non-Responders (n = 11)	*t(29)*	*p*
(1) GHQ-28 Somatic Symptoms	9.85 (4.80)	12.18 (4.54)	1.32	ns	9.25 (4.10)	10.55 (5.15)	.77	ns
(2) GHQ-28 Anxiety/Insomnia	10.90 (4.42)	14.73 (5.63)	2.09	.05	11.00 (4.69)	13.36 (4.70)	1.34	ns
(3) GHQ-28 Social Dysfunction	10.95 (4.63)	13.27 (4.36)	1.36	ns	11.50 (4.57)	12.64 (5.50)	.62	ns
(4) GHQ-28 Severe Depression	8.30 (5.38)	11.36 (6.74)	1.39	ns	8.40 (5.78)	13.36 (7.22)	2.09	.05
(5) GHQ-28 Total	40.00 (16.95)	51.55 (17.17)	1.81	ns	40.15 (16.16)	49.91 (19.27)	1.50	ns
(6) POMS-BI Negative Affect	70.90 (24.49)	78.09 (23.59)	.79	ns	74.20 (18.38)	84.36 (24.28)	1.31	ns
(7) POMS-BI Positive Affect	37.60 (23.55)	33.45 (13.82)	-.5[illegible]	ns	36.50 (18.66)	32.27 (18.62)	-.60	ns
(8) POMS-BI Composed/Anxious	11.80 (8.97)	7.18 (7.33)	-1.46	ns	9.60 (6.39)	5.82 (7.15)	-1.51	ns
(9) POMS-BI Agreeable/Hostile	15.75 (5.81)	14.64 (5.05)	-.53	ns	13.15 (4.56)	14.82 (5.53)	.90	ns
(10) POMS-BI Elated/Depressed	9.85 (8.20)	8.73 (7.98)	-.37	ns	9.90 (7.16)	7.45 (7.82)	-.88	ns
(11) POMS-BI Confident/Unsure	12.85 (9.17)	11.45 (8.18)	-.42	ns	12.30 (7.13)	10.00 (8.57)	-.80	ns
(12) POMS-BI Energetic/Tired	9.45 (7.74)	8.91 (5.49)	-.20	ns	9.95 (6.92)	7.36 (6.49)	-1.02	ns
(13) POMS-BI Clearheaded/Confused	15.10 (10.09)	11.91 (8.42)	-.89	ns	15.30 (8.00)	10.55 (8.37)	-1.56	ns
(14) IES Avoidance	16.55 (11.54)	23.64 (10.97)	1.66	ns	10.65 (7.73)	21.55 (11.05)	3.22	.01
(15) IES Intrusion	24.55 (8.53)	27.64 (9.51)	.93	ns	17.30 (7.45)	25.36 (10.66)	2.47	.05
(16) IES Total	41.10 (17.76)	51.27 (19.84)	1.46	ns	27.95 (12.57)	46.91 (21.31)	2.70	.05
(17) Overall Adjustment	-.20 (.85)	.22 (.84)	1.31	ns	-.24 (.72)	.33 (.96)	1.89	ns

DISCUSSION

Analyses of the longitudinal data showed that the secondary victims of murder in this sample were still experiencing high levels of negative emotional state and event-related impact at six and twelve months post-interview. These findings appear to lend support to previous research into traumatic events which have shown that the effects of traumatic events linger over time (e.g., Folkman, Chesney, Collette, Boccellari & Cooke, 1996; Lehman, Wortman, & Williams, 1987; Ursano, Fullerton, Kao & Bhartiya, 1995; Vachon, Rogers, Lyall, Lancee, Sheldon & Freeman, 1982; Ell, Nishimoto, Mantell & Hamovitch, 1988). However, although levels of negative emotional state and event-related impact were high for subjects who participated twelve months after the initial interview, they were likely to be underestimates of the overall picture of emotional trauma and impact as the sample available was biased towards those with less negative emotional state and event-related impact. These findings should add to the impetus for researchers to continue their study and assessment of people experiencing traumatic events in order to gain a better understanding of the adjustment process.

CHANGE OVER TIME

At six months and twelve months post-interview, levels of negative emotional state and event-related impact remained high. No significant differences in negative emotional state were later found from those at the time of the initial interview. There was, however, a significant decrease in event-related impact in that levels of intrusion and avoidance decreased at six and twelve months. These results indicated that negative emotional state may not diminish over time and remains stable, but that intrusive thoughts and avoidance behaviours may. Dalgleish et al. (1996) found similar results in survivors of the Herald of Free Enterprise disaster with regards to intrusive thoughts. They found a reduction in reported intrusive thoughts over time. However, levels of avoidance behaviours were maintained over time and this was explained as a way of coping with the trauma.

At twelve months, no differences were found in reported levels of control cognitions (both past and future) and just world beliefs. The initial low levels of control and just world cognitions remained low over the next twelve months. Subjects appeared not to be gaining any sense of increased control over their lives or an increased belief that

the world is a just place. The shattering of basic assumptions about the self and the world that Gluhoski & Wortman (1996), Janoff-Bulman (1989) and Janoff-Bulman and Frieze (1983) describe may indeed be long lasting and take many months or years to reassimilate.

REPLICATION

Significant results from Time 1 concerning age, gender, support, number of blame attributions made and feelings of revenge were found to replicate at six and twelve months later (Time 2 & Time 3). Older, female and support seeking subjects continued to report the experiencing of depression, hostility, anxiety, intrusive thoughts, avoidance behaviours and increased negative affect six and twelve months post-interview. Time since the event was not related to emotional state and event-related impact and this suggests that the adjustment process for bereavement through murder is one that does not appear to ameliorate steadily over time, as the initial interviews took place between one and twenty years after the murder occurred.

Older subjects may have increased difficulty in adjusting as they are more likely to be the parents of the murder victims, who have in prior research been shown to exhibit intense and long-lasting grief (see Chapter 3).

Support seeking subjects may remain depressed as a result of their continued rumination, as evidenced by their consistent intrusive thought scores on the IES. This persistent rumination about the murder of their family member and the increased avoidance behaviours do not appear to be beneficial in the adjustment process and may be linked with depression in a vicious cycle. The more depressed, the more rumination, the more avoidance, which in turn, leads to increased depression and so on.

As in the cross-sectional study, female subjects again appear to be continuing to suffer from greater hostility, depression, anxiety, intrusive thought and decreased negative affect than male subjects. These results may in part be explained by a theory put forward by Nolen-Hoeksema (1987) regarding the gender differences found in depression. Her explanation of these differences lies in how genders respond to depression or depressive situations. She suggests that women are more likely to ruminate about their depression or the causes of their depression whereas men are more likely actively to distract themselves from their depressed mood. Nolen-Hoeksema suggests that the men's response may be

more adaptive as it serves to dampen the depression while the women's response is less adaptive as it serves to increase depression.

The Time 1 to Time 3 replication of emotional state and event-related impact, attributions of blame and feelings of revenge, yielded few continued significant results. Attributions of blame to differing sources were not related to one another after twelve months. The gender effect seen at the time of initial interview regarding level of self-blame had disappeared twelve months later. Female and male subjects did not differ significantly in the level that they blamed themselves for the murder occurring, scores indicating a decrease in self-blame in women and an increase in self-blame in men. On the one hand, this result may have occurred as women became more logical with their assignment of blame and desisted from blaming themselves as they became aware that they were in no way to blame for the murder occurring, especially as they were not present or involved. Male subjects, however, could have increased their self-blame as a way of trying to explain and find meaning in the event occurring. On the other hand, female subjects who continued to highly blame themselves may have self-selected not to continue to participate after twelve months due to increased levels of depression that were found at Time 1. This explanation would therefore, bias the female sample toward those with decreased levels of self-blame.

As the level of self-blame was only significantly related to two measures of emotional state and society blame was not significantly related to emotional state and event-related impact at Time 3 as they had been at Time 1, these results suggest that the importance of attributions of blame may wane over time, while subject characteristics (e.g., age and gender) remain steadily important in the long-term adjustment process. Again, it could be that subjects who continue to experience high levels of blame, especially self-blame, exclude themselves from continued participation due to increased levels of distress. If this is the case then those subjects who do participate would report lower levels of blame which could in turn, decrease the level of association between self-blame and emotional state and event-related impact found at Time 3. T-test results on Time 1 level of self-blame with subjects who participated at Time 3 and subjects who did not respond at Time 3 indicated a small level of support for this theory. Subjects who did not respond to participation at Time 3 had higher mean scores of self-blame than subjects

who did participate at Time 3 (means: 4.36 vs. 2.75). However, this result failed to reach significance at the .05 level [$t(29) = 1.88$, $p = .07$].

Significant findings regarding feelings of revenge and emotional state and event-related impact evidenced at Time 1 lacked replication twelve months later, with the exception of intrusive thoughts. At Time 3, subjects who experienced feelings of revenge had higher levels of intrusive thoughts than subjects who did not experience feelings of revenge. No other relationships between feelings of revenge and negative emotional state continued at Time 3. These results suggest that revenge cognitions play an important role in negative emotional state and event-related impact early in the adjustment process, but this role may diminish over time in its effect on emotional state. In addition, the lack of persistence may have occurred due to the differing number of subjects experiencing and not experiencing feelings of revenge at Time 1 compared with at Time 3. At Time 1, a significant majority of subjects reported feelings of revenge (yes = 26; no = 8), while at Time 3 the number of subjects who reported feelings of revenge was almost equal to those who reported no feelings of revenge (yes = 10, no = 9). Therefore, these findings could be due to the decreased number of subjects reporting feelings of revenge which acted to lower the effect found at Time 1.

As few significant relationships regarding attributions of blame, feelings of revenge and emotional state and event-related impact found at the time of the interview remained significant at twelve months later, researchers should be wary of assuming findings will continue to be significant over time. Longitudinal research that allows for such testing is crucial in order to better understand how relationships change over time. Such results could indicate that different psychological variables are important at specific times in adjustment while not as much in others. These results could further illustrate the changing patterns of adjustment to traumatic events over time.

PREDICTION

The most important, significant finding of the analyses regarding the prediction of future adjustment was that the GHQ-28 was the strongest predictor of overall adjustment at six and twelve months post-interview. When initial scores on the GHQ-28 were high, it could be predicted that overall adjustment would be poor in the next six and twelve months. Similarly, although using a different format of the GHQ (GHQ-30), Vachon et

al. (1982) found that scores on the GHQ-30 at one month after the death of a husband was the most significant predictor of future high distress levels in widows. In addition, gender was a significant predictor of GHQ-28, IES and overall adjustment at Time 2. Being female added to the emotional state and event-related impact over a six month period as well as being related to poor adjustment. Most importantly, assessing the GHQ-28 score in victims/survivors of traumatic events could enable the identification of those people who might be at increased risk for poorer future adjustment outcomes.

DISABLING DISTRESS

Disabling distress, a term used to define distress that interferes with daily life, was shown to occur in secondary victims of murder. Subjects who met the criterion for GHQ-28 "caseness" along with three subjects who were too distressed to participate at Time 3 were categorised as experiencing disabling distress. These subjects experienced more somatic symptoms, anxiety and insomnia, social dysfunction, severe depression, unsuredness and confusion at the initial interview assessment and over the next six and twelve months. In addition, higher levels of self-blame was reported by these subjects during the initial interview. Those who met GHQ-28 caseness criterion also had increased levels of intrusive thoughts and avoidance behaviours at twelve months. Further, subjects who were classified as disabled by their distress showed poorer overall adjustment at the time of the initial interview and six months later than subjects who were not subsequently classified as disabled by their distress. These results suggest an element of merit for this classification of distress in the identification of people who are at increased risk for poorer adjustment after having experience a traumatic death.

METHODOLOGICAL LIMITATIONS & STRENGTHS

A number of methodological limitations arose in this study. First, as with the initial round of interviews, the subjects were again from a self-selected group of individuals. A second limitation concerned the sample size at Time 3 (twelve months post-interview). Only twenty subjects from the initial thirty-four agreed to participate at Time 3. Third, a considerable overlap in the number of subjects to each murder occurred at Time 3, partially due to the decreased number of subjects participating at Time 3. As with such limitations, the results derived from Time 3 data should be taken with caution as

no absolute conclusions can be made until further research replicates these findings with larger sample sizes.

While the present findings have certain limitations to their generalisability and power, the study did have several strengths. First, the longitudinal aspect of the study was a strength since previous secondary victims of murder research has lacked such designs. By using a longitudinal approach, a better insight into the adjustment process over time could be gained. Second, all subjects from the initial study participated in the Time 2 assessment (six months post-interview) allowing full data analyses on the entire subjects sample. Third, as with the initial study, this study was empirically-based and it used standardised measures in order to assess emotional state and event-related impact rather than being based solely on observations. Fourth, and finally, the results possessed predictive power. By determining levels of negative emotional state with the GHQ-28, it may be possible to identify those individuals who are most at risk for future adjustment difficulties.

CHAPTER 6

STUDY INVESTIGATING MANIPULATION OF BLAME ATTRIBUTIONS AND ITS EFFECT ON MOOD

INTRODUCTION

The aim of this exploratory study was to determine whether the manipulation of attributions of blame through thinking and writing about traumatic events would lead to a greater increase in negative mood state and decrease in positive mood state.

Results from Chapters 4 and 5 provided support to the existing literature regarding the effects of traumatic events on emotional state and event-related impact, both cross-sectionally and longitudinally. Major findings from Chapter 4 indicated that secondary victims of murder experience and report high levels of negative emotional state and event-related impact related to the murder of their family member, especially in female subjects and subjects who reported high levels of self-blame. In addition, gender and level of self-blame were strong predictors of negative emotional state and event-related impact at the time of the interview. Major findings from Chapter 5 suggested that the negative emotional state and event-related impact resulting from the murder persisted over time as shown by examination of psychological measures at six and twelve months after the interview. Male and female subjects continued to exhibit differences in emotional state and event-related impact six and twelve months following the interview. Further, gender continued to play a role in predicting negative emotional state, event-related impact and overall adjustment six months after the interview. It may be that these increased and long-lasting negative effects are associated with self-blame and gender.

The design of Chapters 4 & 5 limited the ways in which the effects of blame and emotional state and event-related impact could be examined and tested. Only associations could be investigated as blame attributions could not be manipulated and nothing could be concluded as to the causal mechanisms surrounding blame and mood. It could be the case, therefore, that mood may cause attributions of blame or that attributions of blame cause subsequent mood. The exploratory laboratory study in this chapter sought to investigate the latter because of the theoretical and practical implications of such a finding.

Research into such areas as personality, depression, negative affect, post-traumatic stress disorder, grief and bereavement have shown significant gender differences in that women experience more depression (e.g., Chung, Bemak & Kagawa-Singer, 1998), anxiety (Lewinsohn, Gotlib, Lewinsohn, Seeley & Allen, 1998), increased negative affectivity (Fujita, Diener & Sandvik, 1991), post-traumatic stress (Curle & Williams, 1996) and more intense grief reactions than men (Schwab, 1996; Vance, Boyle, Najman & Thearle, 1995). Findings from Chapters 4 & 5 highlight these gender differences in another subject sample: secondary victims of murder. Findings suggest that gender has a cumulative effect over time in that female subjects continue to show increased negative emotional state and event-related impact six and twelve months after initially assessed.

The manipulation of blame cognitions would allow for the examination of the causal effects of blame and mood. By manipulating blame by inducing differing blame attributions related to traumatic events and assessing mood, it could be established whether certain blame cognitions trigger increased or decreased negative and positive affect, therefore causing mood. Tennen & Affleck (1990) suggest that other-blame attributions are reliably related to poor adjustment while other studies (e.g., Frazier, 1990) suggest that self-blame is related to poor adjustment. Chapter 4 could not specifically examine other-blame versus self-blame attributions as all subjects engaged in other-blame. The laboratory study presented in this chapter could examine other-blame attributions independently of self-blame attributions by having subjects write about traumatic events in which they blamed only themselves and traumatic events in which they blamed someone other than themselves.

This chapter was concerned with whether the cognitive induction of blame attributions through writing about traumatic events would lead to increased negative affect and decreased positive affect. In addition, the study was interested in possible gender effects. It was hypothesised that self-blame attributions for traumatic events would lead to significantly increased negative affect and decreased positive affect than for traumatic events in which other-blame attributions or no blame were involved. Further it was hypothesised that female subjects would experience more negative affect and less positive affect after writing about traumatic events than male subjects.

The research questions investigated were:

1. Does writing about engaging in self-blame result in lower mood than writing about engaging in other-blame, or no blame?

2. Will female subjects experience a significantly greater decrease in mood than male subjects?

METHOD

Design

A randomised, between-subjects subjects laboratory study was designed in order to test whether the manipulation of blame attributions would affect subsequent mood. Subjects were randomly assigned to a blame condition (self-, other-, and no blame) to manipulate blame cognitions during a writing exercise. Mood was assessed, blame attributions were cognitively induced and then mood was re-assessed.

Subjects

Eighty-seven first and second year undergraduate psychology students from the University of St Andrews volunteered as subjects. There were fifty-nine female subjects and twenty-eight male subjects (mean age = 19.91, s.d. = 4.39). There was no significant difference in age between first and second year subjects [$t(85) = .31$, $p < .75$].

Materials

Mood Assessments

Visual Analogue Scales

Positive and negative affect was assessed using twelve visual analogue scales (see Appendix C). The twelve scales were comprised of six positive affect adjectives and six negative affect adjectives. The twelve affect adjectives were taken from the six bi-polar scales of the Profile of Mood States (McNair & Lorr, 1984). The six positive affect adjectives were: composed, agreeable, elated, confident, energetic and clearheaded. The six negative affect adjectives were: anxious, hostile, depressed, unsure, tired and confused. The scales were

presented on a ten centimetre horizontal line with anchor words of "not at all" on the left and "very" on the right (see example below). Visual analogue scales have been shown to be valid brief measures of mood (e.g., Grunberg, Groshen, Steingass, Zaretsky & Meyerowitz, 1996; Stern, Arruda, Hooper, Wolfner & Morey, 1997).

VAS example:

not at all	very
composed	composed

Subjects were asked to mark with a vertical line each of the twelve visual analogue scales at a position that would correspond to their current mood.

The twelve affect adjectives from the bi-polar scale of the Profile of Mood States Bi-Polar (POMS-BI) form were used for this measure since the POMS-BI was used for the victims study in Chapters 4 and 5. The POMS-BI itself was not used as it contains seventy-two affect adjectives to mark and was considered too time-consuming for this study. A visual analogue scale was chosen since the assessment of mood before and after the cognitive manipulation would take place after only ten minutes, and it was desired that subjects would not remember exactly what their answers were from the first assessment when completing the second so as to avoid confounding the data.

Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)

The Positive and Negative Affect Schedule (PANAS) is a self-report measure of positive and negative affect (see Appendix C). The scale is comprised of ten positive affect adjectives and ten negative affect adjectives. The ten positive affect adjectives were: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive and active. The ten negative affect adjectives were: distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery and afraid. Subjects were asked to rate the adjectives in terms of their current (present moment) mood on five-point scales (from "very slight/not at all" to "extremely").

The PANAS was chosen as it is an established measure of positive and negative affect. Watson et al. (1988) reported internal consistency of greater than .84 for both sub-scales. In addition, as the VAS used was created for this study, it was determined that an established measure of positive and negative affect should also be included.

Manipulation of Attributions of Blame

Three writing exercises were designed in order to manipulate blame attributions (self-blame, other-blame and no blame) in subjects (see Appendix C). Instructions were a modification of Pennebaker et al. (1988) instructions. The attributions of blame were manipulated by cognitively inducing three different blame cognitions for traumatic and upsetting events. Instructions for the self-blame writing exercise condition were: "Please write about a traumatic and upsetting experience for which you were to blame. Write about what happened and your thoughts and feelings." Instructions for the other-blame writing exercise condition were: " Please write about a traumatic and upsetting experience for which somebody other than you was to blame. Write about what happened and your thoughts and feelings." Instructions for the no-blame/control writing exercise condition were: "Please write about a traumatic and upsetting experience for which nobody was to blame. Write about what happened and your thoughts and feelings."

In order to alleviate any lingering negative mood at the end of the study, subjects were asked to complete a positive mood induction writing exercise. This exercise was not part of the experiment. Instructions for this writing exercise were: "Please write about a pleasant experience for which you were most proud of the outcome. Write about what happened and your thoughts and feelings."

Procedure

The study and its pilot were given ethical approval by the University Ethics Committee in 1997. Results from the pilot study are contained in Appendix C.

Subjects were seen in groups after the finish of their practical class. At the beginning of the experiment, subjects were told that the experiment was concerned with how cognitions affect mood. Subjects were told that they would be writing about an assigned traumatic topic and that their mood would be assessed. After subject consent was obtained, subjects were given the study packet (randomly distributed). The packet consisted of the two pre-test mood

assessments (VAS & PANAS), the writing exercise to manipulate blame cognitions (one page of instructions and three blank sheets of paper for writing), the two post-test mood assessments, and the positive mood induction writing exercise (one page of instructions and three blank sheet of paper for writing). All materials were stapled together in the above order. Subjects were told that their responses would be kept strictly confidential. Subjects were told to complete the first two pages (mood assessments) and not to proceed. Upon completion, subjects were told to move to the next page in the packet. They were instructed that they had ten minutes to write on the assigned topic listed at the top of the page.

After the ten minutes were up, subjects were told to stop writing and to complete the next two pages in the packet (mood assessments). Once completed, subjects were asked to turn to the next page in the packet and complete the last writing exercise. Subjects were told to write for ten minutes on the listed topic (positive mood induction).

Once all subjects had completed the packet, subjects were debriefed on the study.

RESULTS

Reliability analyses were carried out on the positive and negative affect scales of the two measures to assess the level of internal consistency for both Time 1 (pre-test) and Time 2 (post-test). The Time 1 and Time 2 assessment measures had acceptable reliability levels, with the exception of the Time 1 Visual Analogue Scale for positive affect. The individual Cronbach alpha scores are presented in Table 6.1.

Table 6.1 - Reliability Analyses with Cronbach's Alpha

TIME 1

Measure	***Cronbach's Alpha***
VAS Positive Affect	.46
VAS Negative Affect	.74
PANAS Positive Affect	.88
PANAS Negative Affect	.75

TIME 2

Measure	***Cronbach's Alpha***
VAS Positive Affect	.77
VAS Negative Affect	.73
PANAS Positive Affect	.90
PANAS Negative Affect	.89

Condition X Time X Gender Interaction

In order to ascertain whether main effects of blame condition, time and gender, two-way interactions, and an interaction between the three occurred, four separate repeated measures ANOVAs were conducted with each of the mood measures as independent variables, the Time 1 and Time 2 mood measures as within-subject factors and gender and condition (self-blame, other-blame and no blame/control) as between-subject factors. Table 6.2 provides a summary of the results. Table 6.3 provides a summary of results in male and female subjects in each condition (self-blame, other-blame and no blame/control) on the pre and post VAS and PANAS mood assessments.

There were no significant condition main or interaction effects (condition x time x gender; condition x time; condition x gender) for any of the four mood measure variables. For each of the mood assessment variables, there was a significant gender main effect. As shown in Figures 6.1 - 6.4, women showed lower mood (increased negative affect and decreased positive affect) than men. In addition, for three of the mood assessment variables (VAS PA, PANAS NA & PANAS PA) there was a significant time main effect. Scores on the VAS and PANAS changed significantly after writing about traumatic events. Negative affect increased and positive affect decreased in relation to writing about traumatic events. Further, there were

significant gender x time interaction effects for the VAS negative affect, the VAS positive affect, and the PANAS negative affect. No significant gender x time interaction effect was observed for the PANAS positive affect. As seen in Figures 6.1 - 6.4, females subjects had significantly increased negative affect and decreased positive affect over time than male subjects. Female subjects mood was lowered more than male subjects by the writing task.

Table 6.2. Summary Results of 3x2x2 (Condition X Gender X Time) Repeated Measures ANOVAs for Each Mood Measure.

	ConditionXGenderXTime F(2,81)	ConditionXTime F(2,81)	ConditionXGender F(1,81)	GenderXTime F(2,81)	Condition F(2,81)	Gender F(1,81)	Time F(1,81)
VAS NA	ns F = 1.63 p = .20	ns F = .09 p = .92	ns F = 2.64 p = .08	**F = 7.85** **p = .006**	ns F = 1.46 p = .24	**F = 9.93** **p = .002**	ns F = 2.08 p = .15
VAS PA	ns F = .25 p = .78	ns F = 1.73 p = .18	ns F = 1.50 p = .23	**F = 8.49** **p = .005**	ns F = .38 p = .69	**F = 9.70** **p = .003**	**F = 26.50** **p = .000**
PANAS NA	ns F = .13 p = .88	ns F = .06 p = .94	ns F = 1.70 p = .19	**F = 8.55** **p = .004**	ns F = .55 p = .58	**F = 9.20** **p = .003**	**F = 32.03** **p = .000**
PANAS PA	ns F = .77 p = .47	ns F = .05 p = .95	ns F = .62 p = .54	ns F = 2.41 p = .12	ns F = .88 p = .41	**F = 14.87** **p = .000**	**F = 44.55** **p = .000**

Significant results in **bold**

Table 6.3. Summary Results for Male and Female Subjects in Each Condition (Self-Blame, Other-Blame and No Blame/Control) on Pre- and Post VAS and PANAS Mood Assessments

	PRE			POST		
	SELF	OTHER	CONTROL	SELF	OTHER	CONTROL
VAS NA						
MALE	26.57 (7.43)	44.27 (9.77)	33.60 (11.76)	29.25 (16.48)	38.07 (11.87)	29.92 (7.45)
FEMALE	45.93 (18.86)	39.16 (18.18)	25.28 (19.76)	49.91 (15.78)	48.57 (18.63)	44.39 (15.71)
VAS PA						
MALE	65.28 (13.14)	57.97 (12.75)	62.27 (13.78)	63.35 (12.28)	50.20 (8.84)	57.92 (12.31)
FEMALE	49.85 (16.37)	60.55 (35.77)	59.36 (17.94)	39.67 (16.49)	37.79 (14.36)	41.62 (13.03)
PANAS NA						
MALE	12.30 (2.67)	15.20 (2.53)	11.88 (2.36)	14.50 (6.01)	17.20 (5.75)	13.75 (2.44)
FEMALE	14.14 (3.34)	13.84 (3.55)	15.00 (6.48)	19.82 (6.94)	20.00 (7.71)	22.22 (8.88)
PANAS PA						
MALE	31.20 (6.58)	28.60 (6.10)	30.75 (5.23)	26.80 (6.39)	26.50 (5.50)	27.13 (7.40)
FEMALE	23.77 (6.50)	25.32 (5.17)	28.11 (8.41)	19.23 (6.96)	19.21 (5.77)	22.50 (8.86)

Self-Blame - Male = 10, Female = 22
Other-Blame - Male = 10, Female = 19
Control/Non Blame - Male = 8, Female = 18

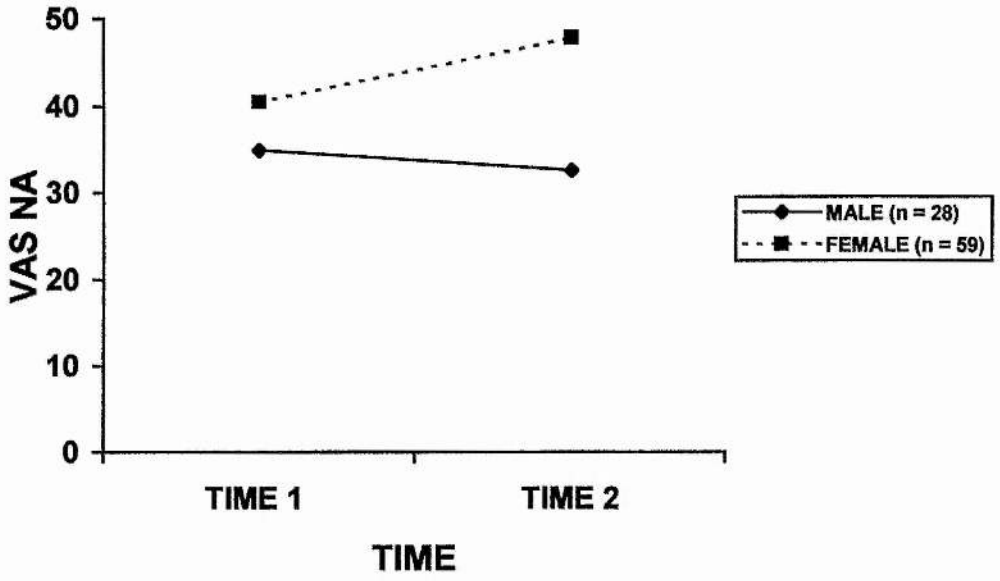


Figure 6.1. Change in Visual Analogue Scale Negative Affect (VAS NA) Mean Scores Over Time By Gender
(Significant gender and gender x time effects)

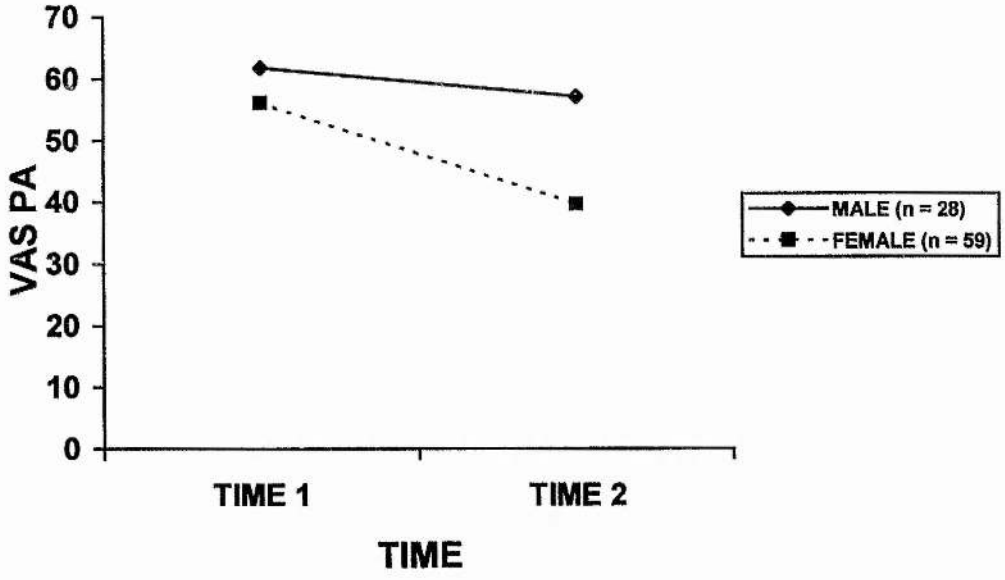


Figure 6.2. Change in Visual Analogue Scale Negative Positive (VAS PA) Mean Scores Over Time By Gender
(Significant gender, time and gender x time effects)

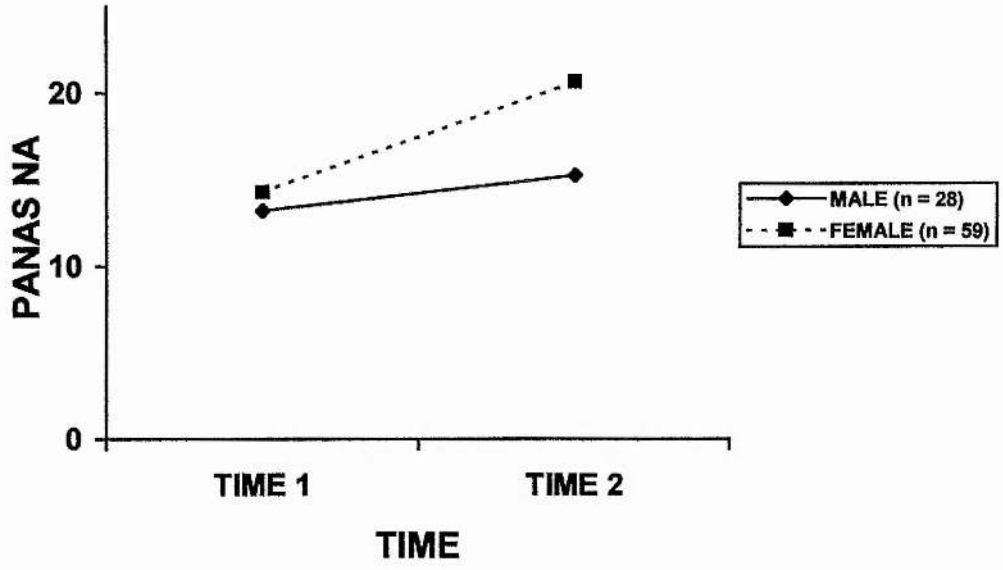


Figure 6.3. Change in Positive and Negative Affect Schedule Negative Affect (PANAS NA) Mean Scores Over Time By Gender (Significant gender, time and gender x time effects)

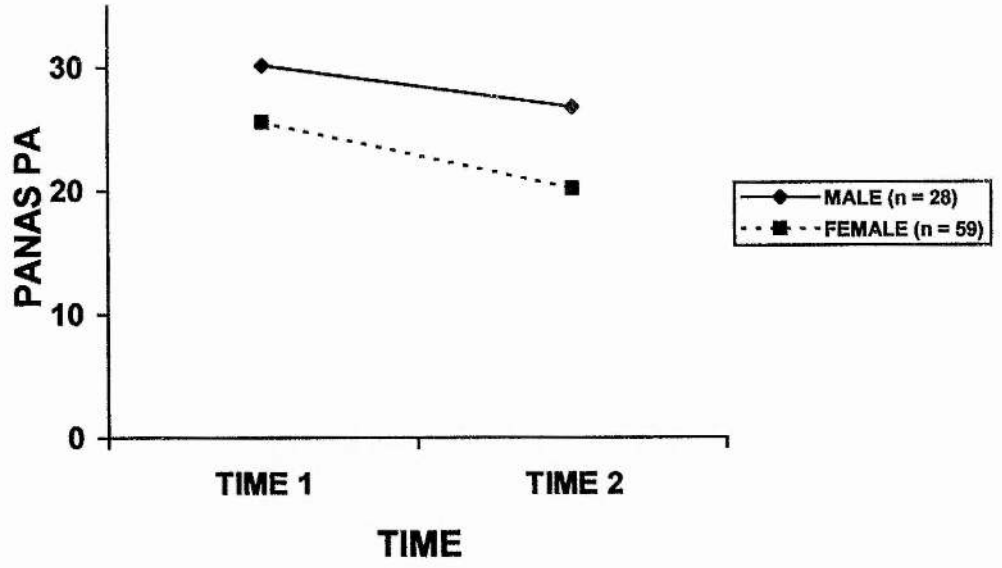


Figure 6.4. Change in Positive and Negative Affect Schedule Positive Affect (PANAS PA) Mean Scores Over Time By Gender (Significant gender and time effects)

DISCUSSION

This exploratory study sought to determine whether the cognitive induction of blame attributions would effect mood by increasing negative affectivity and decreasing positive affectivity in order to ascertain which blame attribution (self- or other-blame) was the most detrimental to mood.

Results indicated that the manipulation of subsequent mood was unsuccessful as there were no differences in mood as a result of writing about attributions of blame. It could be that blame was successfully manipulated but it had no effect on mood. On the other hand, results may have indicated that the manipulation of blame cognitions was unsuccessful. There was no effect of conditions in that no certain attribution of blame (self-, other- and no blame) was found significantly to increase negative affectivity and decrease positive affectivity more than any other. This finding is interesting considering the previous research findings regarding self-blame and other-blame have shown that these blame attributions were associated with adjustment outcome to crime (e.g., Frazier, 1990), illness (e.g., Timko & Janoff-Bulman, 1985) and accidents/disasters (e.g., Joseph, Brewin, Yule & Williams, 1991, 1993) albeit conflicting adjustment outcomes (both positive and negative). Further, results from Chapter 4 (results section 2) showed that in secondary victims of murder, self-blame attributions were related to increased levels of depression, intrusive thoughts and avoidance behaviours. In addition, high levels of self-blame were predictive of increased levels of negative emotional state and event-related impact.

Results indicated that the methodology of writing about traumatic and upsetting events was effective at inducing mood as evidenced by the time main effects. Overall increases in negative affectivity and decreases in positive affectivity were seen in the subjects after only writing for ten minutes about traumatic and upsetting events.

The absence of a manipulation effect may have occurred for several reasons. First, as there was a time effect in that writing about traumatic events increased negative affect and decreased positive affect, it may be that subjects were overwhelmed by writing about traumatic events. Subject may have focused too intently on the actual negative event rather than on their attributions of blame. Second, there may not have been enough control over the blame cognition manipulation. Again, subjects may have focused on the circumstances surrounding the traumatic events rather than on their blame cognitions. In order to overcome this problem, it may be necessary in a future study to change the instructions. By requiring

subjects to write about their blame attributions (how and why they blame) regarding self- and other-blame, they would be focused on the cognitions rather than the event. Subjects in the control condition could be required to write about why they did not blame anyone or anything for the traumatic event. Third, as the subjects wrote for only ten minutes, there may not have been sufficient time for the development of the negative or positive effects of blame attributions to arise. It may take longer for these cognitions to affect mood or maybe even for the participants to develop these distinct blame cognitions. Although concerned with positive effects, results from Pennebaker's and Greenberg's studies regarding disclosure and health benefits (e.g., Pennebaker, 1985; Pennebaker & Francis, 1996; Pennebaker, Kiecolt-Glaser & Glaser, 1988; Pennebaker & Susman, 1988; Greenberg & Stone, 1992; Greenberg, Wortman & Stone, 1996) were achieved after writing for twenty minutes per day over a four-day time period. It may be that by changing the writing time frame to twenty minutes, subjects would have enough time to recall and ruminate about the traumatic event and the associated blame attributions, and hence, a condition manipulation effect would occur.

There was, however, support for a gender effect across all mood measures. Gender differences related to the emotional effects of traumatic and upsetting events were found and were also found in gender x time interaction effects. Female subjects were affected more than male subjects over time by writing about traumatic and upsetting events. They experienced more negative affectivity and less positive affectivity after writing about traumatic and upsetting events. It may be that females in this study rated the traumatic and upsetting events they were writing about as more extreme than the male subjects. Previous research by Bradley (1980) and Cohen, Towbes, & Flocco (1988) found gender differences in the valence ratings of recalled negative and positive events. Results showed that female subjects rated negative events as more negative than male subjects. In addition, it could be that writing more intently about a traumatic event leads to increased levels of negative affect and decreased levels of positive affect. Female subjects may have engaged more fully in the task than male subjects and this might explain the gender differences. Seidlitz & Diener (1998) found that female subjects recalled more positive and negative life events than male subjects and that there was an additional difference in the encoding process of these events. Female subject encoding was more detailed while male subject encoding was more vague. Female subjects also reported that the recalled events were more intense and Seidlitz & Diener suggest that this could be due to the detailed encoding of these events.

These results suggest further support for the findings on gender differences in secondary victims of murder from Chapters 4 (results section 1) and 5. In the secondary victim studies, female subjects were significantly more depressed and anxious than male subjects. In addition, they reported higher levels of somatic symptoms, social dysfunction and avoidance behaviours. Further they reported lower positive affect than male subjects. In the longitudinal secondary victim study, a significant gender x time interaction occurred in that women showed lower mood and poorer overall adjustment at six months after the initial interview.

Although the overall aim of manipulating blame cognitions to determine whether self-blame attributions cause subsequent negative mood was not achieved, the study does possess strengths. First, a new exploratory methodology was employed in an attempt to further examine the causal relation between attributions of blame and emotional state and mood. The methodology did produce an induction of negative mood and therefore, was successful on that account. Modifications to the method, such as changing the instructions to require a more focused recall of blame attributions and increasing writing time, may provide the necessary changes for the eventual success of such a design in exploring the effect of blame attributions, specifically self-blame, on subsequent mood. This new methodology remains a plausible method for examining the causal relationship pathway between blame and mood. Second, the study provides further evidence of gender differences, specifically in relation to negative mood as well as in relation to mood and traumatic events.

CHAPTER 7

GENERAL DISCUSSION

The overall aim of this thesis was to investigate the victimisation and adjustment processes in secondary victims of murder in order to determine the extent of negative emotional state and event-related impact experienced, the role of attributions of blame (especially self- and other-blame) in these processes, and how additional variables such as control and revenge cognitions fit into the processes. Through the three empirical chapters (4, 5, & 6) interesting results have surfaced concerning emotional state and event-related impact, attributions of blame and gender which have theoretical and practical implications as well as implications for future research.

Main Findings

Emotional State and Event-Related Impact

Experiencing and thinking about the traumatic event is related to distress and has been shown to continue over time. In the cross-sectional and longitudinal studies with secondary victims of murder, high levels of negative emotional state and event-related impact were seen at the initial interview assessment and also six and twelve months later. Levels of event-related impact, did however, decrease over time. These results may suggest that negative emotional state perseveres over time, while intrusive thoughts and avoidance behaviours diminish over time. Further, the best predictor of overall adjustment at six and twelve months post-interview was the GHQ-28. When initial levels of negative emotional state were high as assessed by the GHQ-28, it could be predicted that overall adjustment would be poor in the next six and twelve months. The exploratory laboratory study provided support for the existing literature that experiencing and thinking about traumatic events is associated with negative emotional state.

Attributions of Blame

The most important finding regarding attributions of blame involves self-blame. While there remains no clear conclusions in the literature as to whether self-blame or other-blame is associate with better adjustment, the findings from the cross-sectional and longitudinal studies with secondary victims lends support to the negative effects of self-blame in relation to traumatic events found in such research as rape victims (e.g., Frazier, 1990 and adult survivors of child sex abuse (e.g., McMillen & Zuravin, 1997). Self-blame attributions were related to higher levels of negative emotional state and event-related impact at both the time of the initial interview and twelve months later, although fewer associations were present at twelve months. Similar results were found in a study of survivors of motor vehicle accidents. Delahanty, Herberman, Craig, Hayward, Fullerton, Ursano & Baum (1997) found that higher levels of self-blame were associated with high levels of intrusive thoughts and distress. It appears that the potential benefit of self-blame attributions in relation to control cognitions is not relevant for secondary victims of murder, possibly due to the uncontrollability of such a random act as murder and the lack of their presence at the event. In addition, self-blame attributions were a significant predictor of negative emotional state and event-related impact at the initial interview as well as a significant predictor of negative emotional state twelve month later. Level of self-blame, however, did not add significantly to the prediction of negative emotional state or event-related impact at six month or of overall adjustment at any assessment point.

Gender

Findings from the studies presented in this thesis support previous research which has identified gender differences in such areas as traumatic events (e.g., McGreal, Evans & Burrows, 1997), personality (e.g., Feingold, 1994), anxiety (Lewinsohn, Gotlib, Lewinsohn, Seeley & Allen, 1998) and recall of life events (Seidlitz & Diener, 1998). Women were found to experience higher levels of negative emotional state and event-related impact than men in both the cross-sectional and longitudinal studies with secondary victims of murder, as well as in the exploratory laboratory study. In the laboratory study, it was seen that women were more distressed by thinking and writing about traumatic events, which could partly explain the gender differences in the victim studies. In addition, women tended to blame themselves more for the murder of their family member than men. Similar results were found in relation to gender differences in coping with miscarriage and stillbirth (McGreal, Evans & Burrows,

1997) and in current and past violence levels in violent marriages (Langhinrichsen-Rohling, Neidig & Thorn, 1995). Both studies found that women blamed themselves more for the traumatic events than men. Gender also played a role in the prediction of negative emotional state and event-related impact. At the time of initial interview, gender predicted negative emotional state. Being female was predictive of higher levels of anxiety, hostility, depression, unsure feelings and confusion. Further, gender continued to predict emotional state and event-related impact as well as adjustment six months later. Being female predicted negative emotional state and event-related impact and poor overall adjustment. These predictive relationships, however, did not continue after twelve months.

Practical Implications

Results from the cross-sectional and longitudinal studies with secondary victims of murder have practical implications with regards to the need for intervention, the design and implementation of such support and the identification of people at risk for potential problems in adjustment. As high levels of negative emotional state and event-related impact were discovered, even years after the event, the need for intervention is paramount in order to possibly alleviate the suffering of these victims. Research by Schwab (1995-1996) into support group participation by bereaved parents highlighted the point that, "... the majority of the parents who joined a support group wanted the kind of support that was not available through their usual support network - the support of fellow bereaved parents with whom they could identify and who they knew understood their pain" (pg. 57). This finding provides support for the necessity of specific support group intervention. Family members bereaved through murder may need to have a support group atmosphere in which they feel they can identify with other members, that other members "know" what they are experiencing. This implication for support was identified in the qualitative results section of Chapter 4 (results section 4). Participants who were involved in support stated their need to belong to a group in which other members understood their situations.

Further, findings from these studies suggest that support may need to be designed in such a way that it provides more than just peer support. As support-seeking was associated with high levels of intrusive thoughts, it could be that peer support alone is not altogether beneficial or complete in allowing members to continue to ruminate about the event. It may be necessary to utilise a trained mediator to guide the support in order to work through the

important issues. This, in turn, may decrease the rumination and allow for a more productive support intervention.

In addition results indicated that initial participants who subsequently chose not to participate at twelve months had higher levels of anxiety/insomnia six months after the interview and higher levels of severe depression, intrusive thoughts and avoidance behaviours twelve months later than subjects who did participate. These results suggest that there may be extremely distressed family members who, for whatever the reason, are not seeking or are not active in support. This finding warrants the design and implementation of support that is available to all those who are in need of it.

Another implication of the two victim studies regards the identification of family members who may be at risk for complicated adjustment. Results from the studies suggested that factors such as self-blame attributions, gender and high GHQ-28 scores were associated with and predictive of poor adjustment. Interventions, therefore, should include the assessment of attributions of blame, use the GHQ-28 and be aware of gender differences in order to identify those individuals who are most at risk for poorer adjustment.

Again, these findings could ultimately provide important information for the design and implementation of support programs and services for people who have been faced with such a traumatic event.

Future Research

Secondary Victims of Murder

Research should continue to be conducted with secondary victims of murder, as this thesis has provided the only longitudinal study so far. More research which accesses victims earlier in the victimisation process, which recruits a cohort of victims and follows them over a longer period of time would serve to increase knowledge of the adjustment process of these victims. In addition, it would be of great interest to the design and implementation of interventions to discover why certain distressed family members are not seeking support and how to increase acceptance of support in these distressed individuals.

Attributions of Blame

Future research into attributions of blame should be focused more on causal mechanisms in relation to blame and mood rather than the existence of such relationships, as it has been well established that these relationships exist. Two exploratory studies could be conducted which may provide the insight into this causal relationship. First, as investigated in Chapter 6, an examination of whether self-blame attributions cause negative mood state could be conducted, provided several methodological changes from those used in Chapter 6 were made. These changes include more blame focused instruction for the writing exercises and an increase in writing time. Changing the instructions by requiring subjects to write about how and why they blame themselves (self-blame) or someone other than themselves (other-blame) would focus them on the blame attributions rather than on the specifics of the traumatic event. Subjects in a control condition could write about why they did not blame themselves or anything else for the traumatic event. In addition, by lengthening the writing time, it may be possible to provide subjects with sufficient time to develop their blame cognitions. This type of investigation would provide evidence for the hypothesis that blame cognitions cause subsequent mood state. Second, an investigation could be conducted which would examine whether the induction of negative mood state would cause subsequent attributions of blame. Research has established the cognitive mood induction as an effective and valid experimental procedure (e.g., Finegan & Seligman, 1995; Sinclair, Mark, Enzle, Borkovec & Cumbleton, 1994; Wierzbicki & McHugh, 1994; for reviews see Gerrards-Hesse, Spies & Hesse, 1994; Westermann, Spies, Stahl & Hesse, 1996). Alternatively, the mood induction procedure could be non-cognitive e.g., through the use of music (negative, positive and neutral). Subjects would have their attributional style assessed before the MIP (mood induction procedure). After the MIP, subjects would be required to complete a mood assessment and an attribution questionnaire. The mood assessment would determine whether the manipulation occurred and the assessment of attributions would determine whether specific moods produce specific blame attributions. The aim of conducting these two exploratory causal studies would be to determine whether blame caused mood or whether mood caused blame, which would provide a greater insight into the theories of attributions of blame and mood.

Gender

A vast amount of research has been conducted which has addressed differences between genders, yet there have been no definitive explanations for these differences. In order to better understand the aetiology of these differences, an in-depth meta-analysis or systematic review of the existing literature is warranted. Such a review offers the potential for the development of theories which would account more fully for gender differences.

REFERENCES

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87* (1), 49-74.

Amick-McMullan, A., Kilpatrick, D. G., & Resnick, H. S. (1991). Homicide as a risk factor for PTSD among surviving family members. *Behavior Modification, 15* (4), 545-559.

Amick-McMullan, A., Kilpatrick, D. G., & Veronen, L. J. (1989a). Family survivors of homicide victims: A behavioral analysis. *The Behavior Therapist, 12* (4), 75-79.

Amick-McMullan, A., Kilpatrick, D. G., Veronen, L. J., & Smith, S. (1989b). Family survivors of homicide victims: Theoretical perspectives and an exploratory study. *Journal of Traumatic Stress, 2* (1), 21-35.

Anderson, S., & Leitch, S. (1994). Crime and criminal justice research findings no. 1. *The Scottish Crime Survey 1993: First Results.*

Applebaum, D. R., & Burns, G. L. (1991). Unexpected childhood death: Postraumatic stress disorder in surviving siblings and parents. *Journal of Clinical Child Psychology, 20* (2), 114-120.

Bard, M., & Dyk, R. B. (1956). The psychodynamic significance of beliefs regarding the cause of serious illness. *The Psychoanalytic Review, 43*, 146-162.

Bard, M., & Sangrey, D. (1986). *The crime victims' book* (second edition). New Jersey: Citadel Press.

Bradley, C. (1980). Sex differences in reporting and rating of life events: A comparison of diabetic and healthy subjects. *Journal of Psychosomatic Research, 24*, 35 - 37.

Bulman, R. J., & Wortman, C. B. (1977). Attributions of blame and coping in the 'real world': Severe accident victims react to their lot. *Journal of Personality and Social Psychology, 35*, 351-363.

Burger, J. M. (1981). Motivational bias in the attribution of responsibility for an accident: A meta-analysis of the defensive-attribution hypothesis. *Psychological Bulletin, 90*(3), 496 - 512.

Burgess, A. W. (1975). Family reaction to homicide. *American Journal of Orthopsychiatry, 45* (3), 391-398.

Chaikin, A. L., & Darley, J. M. (1973). Victim or perpetrator? Defensive attribution of responsibility and the need for order and justice. *Journal of Personality and Social Psychology, 25*, 268-275.

Chodoff, P., Friedman, S. B., & Hamburg, D. A. (1964). Stress, defenses, and coping behavior: Observations in parents of children with malignant disease. *American Journal of Psychiatry, 120*, 743-749.

Chung, R.C., Bemak, F., & Kagawa-Singer, M. (1998). Gender differences in Psychological distress among Southeast Asian refugees. *Journal of Nervous and Mental Disease, 186*(2), 112 - 119.

Cohen, L. H., Towbes, L. C., & Flocco, R. (1988). Effects of induced mood on self-reported life events and perceived and received social support. *Journal of Personality and Social Psychology, 55*(4), 669 - 674.

Curle, C. E., & Williams, C. (1996). Post-traumatic stress reactions in children: Gender differences in the incidence of trauma reactions at two years and examination of factors influencing adjustment. *British Journal of Clinical Psychology, 35*, 297 - 309.

Dalgleish, T., Joseph, S., Thrasher, S., Tranah, T., & Yule, W. (1996). Crisis support following the Herald of Free Enterprise disaster: A longitudinal perspective. *Journal of Traumatic Stress, 9* (4), 833-845.

Davis, C. G., Lehman, D. R., Wortman, C. B., Silver, R. C., & Thompson, S. C. (1995). The undoing of traumatic life events. *Personality and Social Psychology Bulletin, 21*(2), 109 - 124.

Delahanty, D. L., Herberman, H. B., Craig, K. J., Hayward, M. C., Fullerton, C. S., Ursano, R. J., & Baum, A. (1997). Acute and chronic distress and posttraumtic stress disorder as a function of responsibility for serious motor vehicle accidents. *Journal of Consulting and Clinical Psychology, 65*(4), 560 - 567.

Derry, P.A., & McLachlan, R. S. (1995). Causal attributions for seizures: Relation to preoperative psychological adjustment and postoperative psychosocial function in temporal lobe epilepsy. *Journal of Epilepsy, 8*, 74 - 82.

Downey, G., Silver, R. C., & Wortman, C. B. (1990). Reconsidering the attribution-adjustment relation following a major negative event: Coping with the loss of a child. *Journal of Personality and Social Psychology, 59* (5), 925-940.

Drenovsky, C. K. (1994). Anger and the desire for retribution among bereaved parents. *Omega: Journal of Death & Dying, 29* (4), 303 - 312.

Ell, K., Nishimoto, R., Mantell, J., & Hamovitch, M. (1988). Longitudinal analysis of psychological adaptation among family members of patients with cancer. *Journal of Psychosomatic Research, 32*(4/5), 429 - 438.

Feinauer, L. L., & Stuart, D. A. (1996). Blame and resilience in women sexually abused as children. *American Journal of Family Therapy, 24*(1), 31 - 40.

Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin, 116*(3), 429 - 456.

Finegan, J. E. & Seligman, C. (1995). In defence of the Velten mood induction procedure. *Canadian Journal of Behavioral Science - Revue Canadienne des Sciences du Comportement, 27* (4), 405-419.

Fish, W. C. (1986). Differences of grief intensity in bereaved parents. In T. A. Rando (Ed.), *Parental loss of a child* (415-428). Champaign, IL: Research Press.

Folkman, S., Chesney, M., Collette, L., Boccellari, A., & Cooke, M. (1996). Postbereavement depressive mood and its prebereavement predictors in HIV+ and HIV - gay men. *Journal of Personality and Social Psychology, 70*(2), 336 - 348.

Frazier, P. A. (1990). Victim attributions and post-rape trauma. *Journal of Personality and Social Psychology, 59* (2), 298-304.

Frazier, P. A., & Schauben, L. (1994). Causal attributions and recovery from rape and other stressful life events. *Journal of Social and Clinical Psychology, 13* (1), 1 - 14.

Freedy, J. R., Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., & Tidwell, R. P. (1994). The psychological adjustment of recent crime victims in the criminal justice system. *Journal of Interpersonal Violence, 9* (4), 450 - 468.

Freeman, L. N., Shaffer, D., & Smith, H. (1996). Neglected victims of homicide: The needs of young siblings of murder victims. *American Journal of Orthopsychiatry, 66*(3), 337 - 345.

Frieze, I. H., Hymer, S., & Greenberg, M. S. (1987). Describing the crime victim: Psychological reactions to victimization. *Professional Psychology: Research and Practice, 18* (4), 299-315.

Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: The case for emotional intensity. *Journal of Personality and Social Psychology, 61*(3), 427 - 434.

Gerrardshesse, A., Spies, K., & Hesse, F. W. (1994). Experimental inductions of emotional states and their effectiveness: A review. *British Journal of Psychology, 85* (1), 55-78.

Gluhoski, V. L., & Wortman, C. B. (1996). The impact of trauma on world views. *Journal of Social and Clinical Psychology, 15* (4), 417-429.

Goldberg, D. (1981). *The General Health Questionnaire - GHQ-28.* Windsor: NFER-NELSON.

Goldberg, D., & Williams, P. (no date). *A user's guide to the General Health Questionnaire*. Windsor: NFER-NELSON.

Greenberg, M. A., & Stone, A. A. (1992). Emotional disclosure about traumas and its relation to health: Effects of previous disclosure and trauma severity. *Journal of Personality and Social Psychology, 63*(1), 75 - 84.

Greenberg, M. A., Wortman, C. B., & Stone, A. A. (1996). Emotional expression and physical health: Revising traumatic memories or fostering self-regulation. *Journal of Personality and Social Psychology, 71* (3), 588-602.

Grunberg, S. M., Groshen, S., Steingass, S., Zaretsky, S., & Meyerowitz, B. (1996). Comparisons of conditional quality of life terminology and visual analog scale measurements. *Quality of Life Research, 5* (1), 65-72.

Gyulay, J. E. (1989). The violence of murder. *Issues in Comprehensive Pediatric Nursing, 12* (1), 119-137.

Hazzard, A., Celano, M., Gould, J., Lawry, S., & Webb, C. (1995). Predicting symptomatology and self-blame among child sex abuse victims. *Child Abuse & Neglect, 19*(6), 707 - 714.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218.

James, D. S., & Kristiansen, C. M. (1995). Women's reactions to miscarriage: The role of attributions, coping styles, and knowledge. *Journal of Applied Social Psychology, 25* (1), 59 - 76.

Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology, 37* (10), 1798-1809.

Janoff-Bulman, R. (1982). Esteem and control bases of blame: "'Adaptive' strategies for victims versus observers. *Journal of Personality, 50* (2), 180 - 192.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition, 7*(2), 113 - 136.

Janoff-Bulman, R., & Frieze, I. (1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issues, 39*, 1-18.

Johnston, M., Earll, L., Giles, M., McClenahan, R., Morrison, V., & Stevens, D. (in press). Mood as a predictor of disability and survival in patients newly diagnosed with ALS/MND. *British Journal of Health Psychology.*

Joseph, S. A., Brewin, C. R., Yule, W., & Williams, R. (1991). Causal attributions and psychiatric symptoms in survivors of the Herald of Free Enterprise disaster. *British Journal of Psychiatry, 159*, 542-546.

Joseph, S. A., Brewin, C. R., Yule, W., & Williams, R. (1993). Causal attributions and post-traumatic stress in adolescents. *Journal of Child Psychology and Psychiatry, 34*(2), 247 - 253.

Joseph, S., Dalgleish, T., Thrasher, S., Yule, W., Williams, R., & Hodgkinson, P. (1996). Chronic emotional processing in survivors of the Herald of Free Enterprise disaster: The relationships of intrusion and avoidance at 3 years to distress at 5 years. *Behaviour Research & Therapy, 34*(4), 357 - 360.

Kelley, H. H. (1973). The processes of causal attribution. *American Psychologist, 28*, 107-128.

Kiecolt-Glaser, J. K., & Williams, D. A. (1987). Self-blame, compliance, and distress among burn patients. *Journal of Personality and Social Psychology, 53* (1), 187-193.

Kilpatrick, D. G., Saunders, B. E., Amick-McMullan, A., Best, C. L., Veronen, L. J., & Resnick, H. S. (1989). Victim and crime factors associated with the development of crime-related post-traumatic stress disorder. *Behavior Therapy, 20*, 199 - 214.

Kubler-Ross, E. (1983). *On children and death.* New York: MacMillan Publishing Company.

Langhinrichsen-Rohling, J., Neidig, P, & Thorn, G. (1995). Violent marriages: Gender differences in levels of current violence and past abuse. *Journal of Family Violence, 10*(2), 159 - 176.

Lehman, D. R., Wortman, C. B., & Williams, A. F. (1987). Long-term effects of losing a spouse or child in a motor vehicle crash. *Journal of Personality and Social Psychology, 52*(1), 218-231.

Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin, 85*, 1030-1051.

Lerner, M. J., & Simmons, C. (1966). Observer's reaction to the 'innocent victim': Compassion or rejection? *Journal of Personality and Social Psychology, 4*, 203-210.

Letourneau, E. J., Resnick, H. S., Kilpatrick, D. G., Saunders, B. E., & Best, C. L. (1996). Comorbidity of sexual problems and post-traumatic stress disorder in female crime victims. *Behavior Therapy, 27* (3), 321-336.

Lewinsohn, P. M., Gotlib, I. H., Lewinsohn, M., Seeley, J. R., & Allen, N. B. (1998). Gender differences in anxiety disorders and anxiety symptoms in adolescents. *Journal of Abnormal Psychology, 107*(1), 109 - 117.

Leymann, H. (1985). Somatic and psychological symptoms after the experience of life threatening events: A profile analysis. *Victimology: An International Journal, 10* (1-4), 512-538.

Littlefield, C. H., & Rushton, J. P. (1986). When a child dies: The sociobiology of bereavement. *Journal of Personality & Social Psychology, 51* (4), 797 - 802.

Lorr, M., & McNair, D. M. (1984*). Manual. Profile of Mood States Bi-Polar Form.* San Diego: Educational and Industrial Testing Service.

Lorr, M., & Wunderlich, R. (1988). Self-esteem and negative affect. *Journal of Clinical Psychology, 44*, 36 - 39.

Lurigio, A. J. (1987). Are all victims alike? The adverse, generalized, and differential impact of crime. *Crime & Delinquency, 33* (4), 452-467.

Madden, M. E. (1988). Internal and external attributions following miscarriage. *Journal of Social and Clinical Psychology, 7* (2/3), 113 - 121.

Malcarne, V. L., Compas, B. E., Epping-Jordan, J. E., & Howell, D. C. (1995). Cognitive factors in adjustment to cancer: Attributions of self-blame and perceptions of control. *Journal of Behavioral Medicine, 18* (5), 401-417.

Masters, R., Friedman, L. N., & Getzel, G. (1988). Helping families of homicide victims: A multidimensional approach. *Journal of Traumatic Stress, 1* (1), 109-125.

Mastrovito, R. (1974). Cancer: Awareness and denial. *Clinical Bulletin, 4,* 142-146.

McArthur, L. A. (1972). The how and what of why: Some determinants and consequences of causal attribution. *Journal of Personality and Social Psychology, 22* (2), 171-193.

McDonald, E. R., Wiedenfeld, S. A., Hillel, A., Carpenter, C. L., & Walter, R. A. (1994). Survival in amyotrophic lateral sclerosis: The role of psychological factors. *Archives of Neurology, 51,* 17 - 23.

McGreal, D., Evans, B. J., & Burrows, G. D. (1997). Gender differences in coping following loss of a child through miscarriage or stillbirth: A pilot study. *Stress Medicine, 13,* 159 - 165.

McKillip, J., & Posavac, E. J. (1975). Judgements of responsibility for an accident. *Journal of Personality, 43,* 248-265.

McMillen, C., & Zuravin, S. (1997). Attributions of blame and responsibility for child sexual abuse and adult adjustment. *Journal of Interpersonal Violence, 12* (1), 30-48.

Metalsky, G. I., Joiner, T. E., Wonderlich, S. A., Beatty, W. W., Staton, R. D., & Blalock, J. A. (1997). When will bulimics be depressed and when not? The moderating role of attributional style. *Cognitive Therapy and Research, 21* (1), 61-72.

Meyer, C. B., & Taylor, S. E. (1986). Adjustment to rape. *Journal of Personality and Social Psychology, 50* (6), 1226-1234.

Miller, D. T., & Porter, C. A. (1983). Self-blame in victims of violence. *Journal of Social Issues, 39*(2), 139 - 152.

Moulton, J. M., Sweet, D. M., Temoshok, L., & Mandel, J. S. (1987). Attributions of blame and responsibility in relation to distress and health behavior change in people with AIDS and AIDS-related complex. *Journal of Applied Social Psychology, 17*(5), 493 - 506.

Murphy, S. A. (1996). Parent bereavement stress and preventive intervention following the violent deaths of adolescent or young-adult children. *Death Studies, 20* (5), 441-452.

National Organization of Victim Assistance (1985). *Survivors of Homicide Victims, 2* (3). Washington, D. C., Author.

Nolen-Hoeksema, S. (1987). Sex differences in Unipolar Depression: Evidence and Theory. *Psychological Bulletin, 101*(2), 259 - 282.

Norris, F. H., & Kaniasty, K. (1994). Psychological distress following criminal victimization in the general population: Cross-sectional, longitudinal, and prospective analyses. *Journal of Consulting and Clinical Psychology, 62* (1), 111-123.

Nunnally, J. C. (1981). *Psychometric theory* (second edition). New York: Tata McGraw-Hill Publishing Company Limited.

Parkes, C. M. (1993). Psychiatric problems following bereavement by murder or manslaughter. *British Journal of Psychiatry, 162*, 49-54.

Parkes, C. M., & Weiss, R. S. (1983). *Recovery from Bereavement.* New York: Basic Books.

Peach, M. R., & Klass, D. (1987). Special issues in the grief of parents of murdered children. *Death Studies, 11*, 81-88.

Pennebaker, J. W. (1985). Traumatic experience and psychosomatic disease: Exploring the roles of behavioural inhibition, obsession, and confiding. *Canadian Psychology/Psychologie Canadienne, 26*(2), 82 - 94.

Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognitive Therapy and Research, 10* (6), 601-626.

Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology, 56*(2), 239 - 245.

Pennebaker, J. W., & Susman, J. R. (1988). Disclosure of traumas and psychosomatic processes. *Social Science Medicine, 26*(3), 327 - 332.

Peterson, C., Schwartz, S. M., & Seligman, M. E. P. (1981). Self-blame and depressive symptoms. *Journal of Personality and Social Psychology, 46* (2), 253-259.

Peterson, C., & Seligman, M. E. P. (1983). Learned helplessness and victimization. *Journal of Social Issues, 39* (2), 103-116.

Rando, T. A. (1996). On treating those bereaved by sudden, unanticipated death. *In Session: Psychotherapy in Practice, 2* (4), 59-71.

Range, L. M., Walston, A. S., & Pollard, P. M. (1992). Helpful and unhelpful comments after suicide, homicide, accident or natural death. *Omega: Journal of Death & Dying, 25* (1), 25 - 31.

Reed, M. D. (1993). Sudden death and bereavement outcomes: The impact of resources on grief symptomology and detachment. *Suicide and Life-Threatening Behavior, 23* (3), 204 - 220.

Riggs, D. S., & Kilpatrick, D. G. (1990). Families and friends: Indirect victimization by crime. In A. J. Lurigio, W. G. Skogan, & R. C. Davis (Eds.), *Victims of Crime - Problems, Policies and Programs* (120-138). London: Sage Publications.

Rinear, E. E. (1988). Psychosocial aspects of parental response patterns to the death of a child by homicide. *Journal of Traumatic Stress, 1* (3), 305-322.

Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues, 31* (3), 65-89.

Rynearson, E. K. (1996). Psychotherapy of bereavement after homicide: Be offensive. *In Session: Psychotherapy in Practice, 2* (4), 47-57.

Rynearson, E. K., & McCreery, J. M. (1993). Bereavement after homicide: A synergism of trauma and loss. *American Journal of Psychiatry, 150* (2), 258 - 261.

Sanders, C. M. (1979-1980). A comparison of adult bereavement in the death of a spouse, child and parent. *Omega: Journal of Death & Dying, 10*(4), 303 - 322.

Sanders, C. M. (1988). Risk factors in bereavement outcomes. *Journal of Social Issues, 44* (3), 97 - 111.

Schwab, R. (1995-1996). Bereaved parents and support group participation. *Omega: Journal of Death & Dying, 32*(1), 49 - 61.

Schwab, R. (1996). Gender differences in parental grief. *Death Studies, 20*, 103 - 113.

Seidlitz, L., & Diener, E. (1998). Sex differences in the recall of affective experiences. *Journal of Personality and Social Psychology, 74*(1), 262 - 271.

Shaver, K. G. (1970). Defensive attribution: Effects of severity and relevance on the responsibility assigned for an accident. *Journal of Personality and Social Psychology, 14* (2), 101-113.

Shaver, K. G., & Drown, D. (1986). On causality, responsibility and self-blame: A theoretical note. *Journal of Personality and Social Psychology, 50* (4), 697-702.

Shaw, J. I., & McMartin, J. A. (1977). Personal and situational determinants of attribution of responsibility for an accident. *Human Relations, 30*, 95-107.

Silver, R. L., Boon, C., & Stones, M. H. (1983). Searching for meaning in misfortune: Making sense of incest. *Journal of Social Issues, 39*(2), 81 - 102.

Sinclair, R. C., Mark, M. M., Enzle, M. E., Borkovec, T. D., & Cumbleton, A. G. (1994). Toward a multiple-method view of mood induction: The appropriateness of a modified Velten mood induction technique and the problems of procedures with group assignment to conditions. *Basic and Applied Social Psychology, 15* (4), 389-408.

Solomon, M. J.,& Thompson, J. (1995). Anger and blame in three technological disasters. *Stress Medicine, 11*, 199 - 206.

Sorenson, S. B., & Golding, J. M. (1990). Depressive sequelae of recent criminal victimization. *Journal of Traumatic Stress, 3* (3), 337 - 350.

Sprang, M. V., McNeil, J. S., & Wright, R., Jr. (1989). Psychological changes after the murder of a significant other. *Social Caseworker: The Journal of Contemporary Social Work, 70* (3), 159-164.

Stern, R. A., Arruda, J. E., Hooper, C. R., Wolfner, G. D., & Morey, C. E. (1997). Visual analogue mood scales to measure internal mood state in neurologically impaired patients: Description and initial validity evidence. *Aphasiology, 11* (1), 59-71.

Taylor, S. E., Lichtman, R. R., & Wood, J. V. (1984). Attributions, beliefs about control and adjustment to breast cancer. *Journal of Personality and Social Psychology, 46* (3), 489-502.

Tennen, H., & Affleck, G. (1990). Blaming others for threatening events. *Psychological Bulletin, 108* (2), 209-232.

Tennen, H., Affleck, G., & Gershman, K. (1986). Self-blame among parents of infants with perinatal complications: The role of self-protective motives. *Journal of Personality and Social Psychology, 50* (4), 690-696.

Thornton, B. (1984). Defensive attribution of responsibility: Evidence for an arousal-based motivational bias. *Journal of Personality and Social Psychology, 46* (4), 721-734.

Timko, C., & Janoff-Bulman, R. (1985). Attributions, vulnerability, and psychological adjustment: The case of breast cancer. *Health Psychology, 4* (6), 521 - 544.

Turnquist, D. C., Harvey, J. H., & Andersen, B. L. (1988). Attributions and adjustment to life threatening illness. *British Journal of Clinical Psychology, 27*, 55-65.

Ullman, S. E. (1996). Social reactions, coping strategies and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly, 20* (4), 505-526.

Ursano, R. J., Fullerton, C. S., Kao, T., & Bhartiya, V. R. (1995). Longitudinal assessment of posttraumatic stress disorder and depression after exposure to traumatic death. *The Journal of Nervous and Mental Disease, 183*(1), 36 - 42.

Vachon, M. L. S., Rogers, J., Lyall, W. A., Lancess, W. J., Sheldon, A. R., & Freeman, S. J. J. (1982). Predictors and correlates of adaptation to conjugal bereavement. *American Journal of Psychiatry, 139* (8), 998 - 1002.

Vance, J. C., Boyle, F. M., Najman, J. M., & Thearle, M. J. (1995). Gender differences in parental psychological distress following perinatal death or sudden infant death syndrome. *British Journal of Psychiatry, 167*, 806 - 811.

Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social Psychology, 3* (1), 73-79.

Warren, L., Wrigley, J. M., Yoels, W. C., & Fine, P. R. (1996). Factors associated with life satisfaction among a sample of persons with neurotrauma. *Journal of Rehabilitation Research and Development, 33* (4), 404-408.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54*, 1063 - 1070.

Weinberg, N. (1994). Self-blame, other blame and desire for revenge: Factors in recovery from bereavement. *Death Studies, 18*, 583-593.

Westermann, R., Spies, K., Stahl, G, & Hesse, F. W. (1996). Relative effectiveness and validity of mood induction procedures: A meta-analysis. *European Journal of Social Psychology, 26* (4), 557-580.

Wierzbicki, M., Westerholm, P., & McHugh, K. (1994). A comparison of cognitive and behavioral inductions of negative mood. *Journal of Psychology, 128* (6), 651-657.

Winkel, F. W., Denkers, A., & Vrji, A. (1994). The effects of attributions on crime victims' psychological readjustment. *Genetic, Social and General Psychology Monographs, 120* (92), 147-168.

Wong, P. T. P., & Weiner, B. (1981). When people ask 'why' questions and the heuristics of attributional search. *Journal of Personality and Social Psychology, 40*, 650-663.

APPENDICES

APPENDIX A

1. Personal Information Sheet
2. Introduction/Consent
3. Interview Schedule
4. General Health Questionnaire 28
5. Profile of Mood State Bi-Polar Form
6. Impact of Event Scale
7. Just World Scale

APPENDIX B

1. One-year Follow-up Bereavement Questionnaire

APPENDIX C

1. Subject Consent Form
2. Demographic Information/Packet Instructions
3. Visual Analogue Mood Scale
4. Positive and Negative Affect Schedule
5. Instructions For Self-Blame Writing Exercise Condition
6. Instructions For Other-Blame Writing Exercise Condition
7. Instructions For No Blame/Control Writing Exercise Condition
8. Instructions For Positive Mood Induction Writing Exercise
9. Pilot Study Results and Discussion

APPENDIX A

1. Personal Information Sheet
2. Introduction/Consent
3. Interview Schedule
4. General Health Questionnaire 28
5. Profile of Mood State Bi-Polar Form
6. Impact of Event Scale
7. Just World Scale

Date:_____ **CONFIDENTIAL**

PERSONAL INFORMATION SHEET

PLEASE PRINT

1. NAME:_____

2. FULL ADDRESS (including post code):_____

_____

3. TELEPHONE NUMBER or CONTACT NUMBER:_____

PLEASE TICK APPROPRIATE BOX:

4. GENDER: ☐ MALE

☐ FEMALE

5. AGE:_____

6. RELIGION (if any):_____

PLEASE TICK APPROPRIATE BOX:

7. MARITAL STATUS -

☐ SINGLE

☐ MARRIED

☐ DIVORCED

☐ WIDOW/ER

8. EMPLOYMENT STATUS - ☐ STUDENT

☐ EMPLOYED ☐ PART-TIME ☐ FULL-TIME

SPECIFY OCCUPATION:_____

☐ UNEMPLOYED

☐ RETIRED

9. NAME OF VICTIM:_____

10. YOUR RELATIONSHIP TO VICTIM:_____

11. DATE OF CRIME:_____

12. CRIME TYPE:_____

13. WHERE DID THE CRIME TAKE PLACE?:_____

PLEASE TICK APPROPRIATE BOX(ES):

14. DO YOU KNOW IF THE CASE WENT TO COURT?

☐ YES **OUTCOME:**

☐ NOT GUILTY

☐ NOT PROVEN

☐ GUILTY
SENTENCE:_____

☐ NO

INTRODUCTION

I am going to be interviewing you today about the murder of your family member. The interview will cover several topics which include:

1. the crime specifics
2. your attributions
3. your reactions to the crime
4. effects of the murder on your life
5. general questions

I would like to ask for your permission to tape this interview so that I will not miss any of your responses or have to take as many notes. This will also give us the opportunity to chat more freely and easily. The tape of your interview will be kept strictly confidential and I will be the only person to listen to it or have access to it. Any responses used for future publication will not identify you in any way.

I would be grateful if you would not discuss your interview with other family members who are participating in the study until after they have been interviewed. I am asking this of you to make sure that all of the interview responses are kept confidential.

If you feel the need, at any point during the interview, to take a break or stop the interview, please feel free to tell me. If you need for me to repeat a question or slow down, please do not hesitate to say. I want you to be as comfortable during the interview as possible.

Do you have any questions before we begin?

I, _____, give my permission for this interview to be taped with the understanding that it will not be accessible to anyone else but the interviewer (Stacy Kahler).

_____ _____

Signed Date

CONFIDENTIAL

Date of Interview:_____
Interviewee:_____

INTERVIEW SCHEDULE

CRIME SPECIFICS:

1. Please give a brief description of the incident (e.g. what happened, etc.)

2. Give date and location of crime (e.g. part of town, out of town, etc.)

3. Give circumstances surrounding the murder

   who was the offender?
   was the offender known or a stranger?

   IF KNOWN - who was it?
   how do you know the offender?
   has this caused any problems?

4. Who notified you? (police, hospital, friend, etc.)

5. How were you notified? (home visit, telephone, news, etc.)

6. In terms of the notification process (by police, media, etc.), did you experience any emotional problems based on how you were notified?

   IF YES - what problems did you experience?
   how do you think it could have been done better?

7. Did you make a formal identification of the body?

   IF YES - how did you feel when you saw the body?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

IF NO - who id'd the body? (friend, other family member - SPECIFY)

8. Did you view the body, e.g. before funeral preparation?

IF YES - why did you want to see the body?
do you regret seeing the body?

IF NO - do you regret this?

was it your choice not to view the body?

if yes - why did you choose not to view the body?

if no - who made the choice for you? (police, hospital staff, family member)

how did this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

ATTRIBUTIONS:

9. At the time of the murder, was it important to you to find a reason or meaning for the murder happening?

IF YES - why did you feel it was important?

IF NO - why did you think it wasn't important?

10. When did you first search for the meaning or reason for the murder happening?

(specify time since murder in months)

11. Have you found a meaning or reason for the murder happening?

IF YES - what was it?

IF NO - are you still searching?

if yes/no - why?

12. Did you ever ask "why me or why my family"?

IF YES - did you find an answer?

if yes - what was it?

if no - are you still asking?

if yes - have you found an answer?
how often do you ask this question?
(specify in times per month)

if no - why?

Many people may have an idea as to why this happened. What I am really interested in, is what <u>you</u> think, not what other people said or believe.

13. Why do <u>you</u> think this happened?

14. Did you discuss your explanation of why the murder happened with anyone?

IF YES - who?
did they agree with you?
why?

15. Why do you think the person or people who committed the murder did it - what was their motivation?

16. What sort of person/people do you think he/they is/are?

17. Do you think there are lots of people like that?

IF YES - why?

18. Do you feel the victim was responsible in any way?

IF YES - why and for what reasons?

19. Do you feel you were responsible in any way?

IF YES - why and for what reasons?

FOR THE NEXT QUESTION, I WOULD LIKE YOU TO RANK THE FOLLOWING FACTORS IN TERMS OF HOW MUCH YOU BLAME EACH OF THEM. THE RANKING IS FROM 1 TO 6 WITH 6 BEING 'BLAME THE MOST' AND 1 BEING 'NOT AT ALL TO BLAME'. SHOW CARD TO INTERVIEWEE.

20. At the time of the murder, who did you blame?

(1) victim
(2) self
(3) other SPECIFY:_____
(4) environment/where you live
(5) society/the way the world is
(6) chance

If victim/ self /other are ranked in the top 3 (1 - 4 - 6), ask question 21; if not GO TO QUESTION 22

21. At the time of the murder, what caused you to blame the victim/self/other?

code later on: behavioural/characterological self-blame
internality
stability
globality
controllability

22. At the time of the murder, did you think you could have done something so that the murder could have been avoided?

IF YES -what could have been done?

IF NO - how does this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

23. Have your attributions of blame changed since the murder?

IF YES - which ones have changed

IF victim/self/other:

what has caused you to blame the victim/self/other?

code later on: behavioural/characterological self-blame
internality
stability
globality
controllability

what are they now?

24. To what extent do you feel the murder caused by something you could have controlled?

completely uncontrollable				completely controllable
1	2	3	4	5

25. What do you feel was controllable or uncontrollable?

26. To what extent do you think you have control over a similar event happening to yourself in the future?

completely uncontrollable				completely controllable
1	2	3	4	5

27. To what extent do you think you have control over a similar event happening to a member of your family in the future?

completely uncontrollable				completely controllable
1	2	3	4	5

28. How likely do you think it is that you would experience something like this again?

extremely likely to				not at all likely
1	2	3	4	5

REACTIONS TO THE CRIME:

29. At the time of notification, what was your initial emotional response to being notified of the murder?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

30. What were you feeling during the time period after being notified of the murder (e.g. release of body, funeral, etc.)?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

31. What emotions are you still experiencing?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

32. How often do you experience these emotions?

(in times per week)

33. Do you think about the murder often?

IF YES - how often?
what do you think about?
how does this make you feel (list emotions)?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

do you try to avoid thinking about it?

if yes - why?
what do you do to avoid thoughts of the murder?

34. Did you seek professional help (e.g. GP, social worker, counsellor, etc.)?

IF YES - are you still seeking professional help?

35. When and why did you decide/or not decide to come to FOMC?

36. Do you feel it is helping you?

IF YES - how?
how long have you been attending?

EFFECTS OF MURDER ON LIFE:

37. Give a brief description of how the murder has affected your life

38. How seriously would you say you have been affected by the murder?

(1) very seriously affected
(2) seriously affected
(3) fairly seriously affected
(4) somewhat affected
(5) slightly affected
(6) hardly affected at all
(7) not affected at all

39. Do you feel differently about yourself now?

IF YES - in what ways?

40. Have your views about the world changed (e.g. not safe, no one cares, etc.)?

41. <u>If employed</u> - Did you feel the murder affected how you did your job?

IF YES - in what ways?
for how long?
is it still now?

42. <u>If employed</u> - Was your boss and/or co-workers supportive at the time of the murder?

IF YES - what did they do that was supportive? (e.g. time off, listening, etc.)
how long did this support last?
are they still supportive?

IF NO - how were they unsupportive?
how did this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

43. Was your social life affected?

IF YES - in what ways?
for how long?
is it still now?

44. Were your neighbours supportive at the time of the murder?

IF YES - what did they do that was supportive? (e.g. helping out, food, listening)
how long did this support last?
are they still supportive now?

IF NO - how were they unsupportive?
how did this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

45. Did you experience changes in eating patterns?

IF YES - what were they? (e.g. gain or lose weight)
for how long?
is it still occurring?

46. Did you experience changes in sleeping patterns?

IF YES - what were they? (e.g. couldn't sleep, couldn't get up)
for how long? (in months)
is it still occurring and how often?

47. Did you have nightmares concerning the murder?

IF YES - what were they?
how often? (times per week)
for how long? (in months)
is it still occurring and how often?

48. Have you ever experienced feelings of revenge?

IF YES - when?
how often?
are you still experiencing feelings of revenge?

49. Did you or do you experience heightened emotions on the anniversary of the murder or on other significant days? (e.g. birthdays, anniversaries, etc.)

IF YES - when?
how do you feel?
what do you do to cope?

50. Have your relationships with your family and friends changed?

IF YES - how and what has changed?
do you see immediate family members more or less?
do you see extended family members more or less?
do you see friends more or less?

If answer less - how does this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

51. Do you think that your role in your family and in society has changed?
(e.g. not a parent, only child now, no husband/wife anymore, etc.)

IF YES - how does this make you feel?

CIRCLE RESPONSES GIVEN - IF NOT GIVEN, ASK - ADD ANY ADDITIONAL GIVEN

(G)iven or (P)rompted

_____angry	_____anxious	_____bitter
_____confused	_____depressed	_____fearful
_____guilty	_____helpless	_____isolated
_____numb	_____out of control	_____rage
_____sad	_____scared	_____shocked
_____sorrow	_____surprised	_____vengeful
_____worried		

OTHERS:_____

52. Do you feel people look at you or treat you differently now?

IF YES - how?
why?
how has this affected you?

53. How do you feel you are coping?

IF GOOD - what do you feel you are doing to help yourself cope?

IF BAD - why?
what are you doing that you feel is keeping you from coping effectively?
is this caused by someone else's behaviour or treatment of you?

if yes - who do you feel is causing you to cope poorly?
what are they doing to cause this?

54. How was your general health before the murder?

55. Would you say your health has been affected:

(1)very badly? if yes - how?
(2)quite badly? if yes - how?
(3)somewhat badly? if yes - how?
(4)hardly at all?

56. Have you experienced any physical symptoms?

A. IF YES - HAVE SUBJECT LIST SYMPTOMS (IF NO - GO TO QUESTION 60)

CHECKLIST - (G)iven or (P)rompted:

_____ aches/pains in body
_____ backache
_____ constipation
_____ diarrhoea
_____ fast heartrate
_____ fatigue
_____ gain of weight
_____ headaches
_____ heart attack
_____ heart palpitations
_____ high blood pressure
_____ hot/cold spells
_____ indigestion
_____ loss of weight
_____ loss of energy
_____ nausea
_____ numbness in arms
_____ numbness in hands
_____ numbness in legs
_____ pain in ears
_____ pains in head
_____ pains in stomach
_____ shaky hands
_____ shaky legs
_____ shortness of breath
_____ sore throat
_____ stroke
_____ sweating
_____ tightness/pressure in chest
_____ tightness/pressure in head
_____ vomiting

B. Did they occur before (b) or after (a) the murder?

Mark (b) or (a) by the symptoms above

C. Did you seek help for the symptoms (dr., etc.)?

IF NO - Why?

IF YES - Diagnosis?

Medication prescribed?

57. **If experienced physical symptoms:**

A. Are they still occuring?

IF YES - Which ones?

For how long?

58. **If experienced physical symptoms since the murder:**

A. What do you think caused these symptoms?

59. **If had any contact with courts/media, etc.:**

A. Did you re-experience any of the symptoms?

IF YES - a. Which ones?

b. When did they appear and for how long?

c. Why do you think these symptoms recurred?

60. Would you say that this experience has affected your behaviour in any way; are there things you do now which you didn't do before the murder happened?

IF YES - what things?
why?

61. Are there things you don't do any more since the murder happened?

IF YES - what things?
why?

62. Do you feel that you are or will be able to reconstruct your life to be meaningful again?

IF YES - what are you doing or will you do to accomplish this?

IF NO - why do you feel this way?

63. Have your feelings about the murder and the changes it caused in your life been altered in the time since the murder?

IF YES - what feelings have changed?

what are they now?

has anything else changed?

how?

64. Do you feel you were affected differently than other family members?

IF YES - were you affected more or less?
why do you think you were affected differently?
has this caused problems in your relationships?

if yes - what kinds of problems has it caused?
who has it caused problems with?

65. Considering everything which has happened to you since the murder occurred, what do you think has been the most upsetting aspect?

General Questions

66. What causes crime in society?

67. What could be done to reduce or combat crime in society?

68. Had you been a victim of crime or unpleasant incident before the murder happened?

IF YES (BE AS SPECIFIC AS POSSIBLE) - when (date)?
what crime/incident?

69. Have you been a victim of crime or unpleasant event since the murder happened?

IF YES (BE AS SPECIFIC AS POSSIBLE)- when (date)?
what crime/incident?

70. Have you been involved with the criminal justice system in any other way before the murder happened?

IF YES (BE AS SPECIFIC AS POSSIBLE) - when (date)?
in what capacity?

71. Have you experienced any negative life events since the murder happened and now?

(e.g. losing job, divorce, moving, death of someone close to you))

72. Before the murder happened, had you experienced the death of someone close to you?

IF YES - how many?
when?

73. Is there anything we haven't talked about that you feel is important and you would like to address?

74. Could you tell me why you decided to take part in this study?

FIELD NOTES:

THE GENERAL HEALTH QUESTIONNAIRE

GHQ 28

David Goldberg

Please read this carefully.

We should like to know if you have had any medical complaints and how your health has been in general, *over the past few weeks*. Please answer ALL the questions on the following pages simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

It is important that you try to answer ALL the questions.

Thank you very much for your co-operation.

Have you recently

A1 – been feeling perfectly well and in good health?	Better than usual	Same as usual	Worse than usual	Much worse than usual
A2 – been feeling in need of a good tonic?	Not at all	No more than usual	Rather more than usual	Much more than usual
A3 – been feeling run down and out of sorts?	Not at all	No more than usual	Rather more than usual	Much more than usual
A4 – felt that you are ill?	Not at all	No more than usual	Rather more than usual	Much more than usual
A5 – been getting any pains in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
A6 – been getting a feeling of tightness or pressure in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
A7 – been having hot or cold spells?	Not at all	No more than usual	Rather more than usual	Much more than usual

B1 – lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
B2 – had difficulty in staying asleep once you are off?	Not at all	No more than usual	Rather more than usual	Much more than usual
B3 – felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
B4 – been getting edgy and bad-tempered?	Not at all	No more than usual	Rather more than usual	Much more than usual
B5 – been getting scared or panicky for no good reason?	Not at all	No more than usual	Rather more than usual	Much more than usual
B6 – found everything getting on top of you?	Not at all	No more than usual	Rather more than usual	Much more than usual
B7 – been feeling nervous and strung-up all the time?	Not at all	No more than usual	Rather more than usual	Much more than usual

Please turn over

Have you recently

C1 – been managing to keep yourself busy and occupied?	More so than usual	Same as usual	Rather less than usual	Much less than usual
C2 – been taking longer over the things you do?	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
C3 – felt on the whole you were doing things well?	Better than usual	About the same	Less well than usual	Much less well
C4 – been satisfied with the way you've carried out your task?	More satisfied	About same as usual	Less satisfied than usual	Much less satisfied
C5 – felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
C6 – felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
C7 – been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual

---

D1 – been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
D2 – felt that life is entirely hopeless?	Not at all	No more than usual	Rather more than usual	Much more than usual
D3 – felt that life isn't worth living?	Not at all	No more than usual	Rather more than usual	Much more than usual
D4 – thought of the possibility that you might make away with yourself?	Definitely not	I don't think so	Has crossed my mind	Definitely have
D5 – found at times you couldn't do anything because your nerves were too bad?	Not at all	No more than usual	Rather more than usual	Much more than usual
D6 – found yourself wishing you were dead and away from it all?	Not at all	No more than usual	Rather more than usual	Much more than usual
D7 – found that the idea of taking your own life kept coming into your mind?	Definitely not	I don't think so	Has crossed my mind	Definitely has

A ☐ **B** ☐ **C** ☐ **D** ☐ **TOTAL** ☐

Published by The NFER-NELSON Publishing Company Ltd., Darville House, 2 Oxford Road East, Windsor, Berks. SL4 1DF.

First published 1978

Code 4075 02 4
3 (3.89) 1104

ME _____ DATE _____

IDENTIFICATION

elow are words that describe feelings and moods people have. Please read EVERY word carefully. Then fill
ı ONE space under the answer which best describes how you have been feeling DURING THE PAST WEEK
ICLUDING TODAY.

uppose the word is *happy*. Mark the one answer which is closest to how you have been feeling DURING
HE PAST WEEK INCLUDING TODAY.

The numbers refer to these phrases:

0 = Much unlike this
1 = Slightly unlike this
2 = Slightly like this
3 = Much like this

MARKING DIRECTIONS

- USE A NO. 2 PENCIL ONLY.
- MAKE NO STRAY MARKS.
- ERASE CLEANLY.

CORRECT MARK ⓪①●③ INCORRECT MARK ⊗✓◦⊘

	MUCH UNLIKE THIS	SLIGHTLY UNLIKE THIS	SLIGHTLY LIKE THIS	MUCH LIKE THIS
. Composed	0	1	2	3
2. Angry	0	1	2	3
3. Cheerful	0	1	2	3
4. Weak	0	1	2	3
5. Tense	0	1	2	3
6. Confused	0	1	2	3
7. Lively	0	1	2	3
8. Sad	0	1	2	3
9. Friendly	0	1	2	3
10. Tired	0	1	2	3
11. Strong	0	1	2	3
12. Clearheaded	0	1	2	3
13. Untroubled	0	1	2	3
14. Grouchy	0	1	2	3
15. Playful	0	1	2	3
16. Timid	0	1	2	3
17. Nervous	0	1	2	3
Mixed-up	0	1	2	3
19. Vigorous	0	1	2	3
20. Dejected	0	1	2	3
21. Kindly	0	1	2	3
22. Fatigued	0	1	2	3
23. Bold	0	1	2	3
24. Efficient	0	1	2	3
25. Peaceful	0	1	2	3
26. Furious	0	1	2	3
27. Lighthearted	0	1	2	3
28. Unsure	0	1	2	3
29. Jittery	0	1	2	3
30. Bewildered	0	1	2	3
31. Energetic	0	1	2	3
32. Lonely	0	1	2	3
33. Sympathetic	0	1	2	3
34. Exhausted	0	1	2	3
35. Powerful	0	1	2	3
36. Attentive	0	1	2	3
37. Serene	0	1	2	3
38. Bad tempered	0	1	2	3
39. Joyful	0	1	2	3
40. Self-doubting	0	1	2	3
41. Shaky	0	1	2	3
42. Perplexed	0	1	2	3
43. Active	0	1	2	3
44. Downhearted	0	1	2	3
45. Agreeable	0	1	2	3
46. Sluggish	0	1	2	3
47. Forceful	0	1	2	3
48. Able to concentrate	0	1	2	3
49. Calm	0	1	2	3
50. Mad	0	1	2	3
51. Jolly	0	1	2	3
52. Uncertain	0	1	2	3
53. Anxious	0	1	2	3
54. Muddled	0	1	2	3
55. Ready-to-go	0			
56. Discouraged	0			
57. Good-natured	0			
58. Weary	0			
59. Confident	0			
60. Businesslike	0			
61. Relaxed	0			
62. Annoyed	0			
63. Elated	0			
64. Inadequate	0			
65. Uneasy	0			
66. Dazed	0			
67. Full of pep	0			
68. Gloomy	0			
69. Affectionate	0			
70. Drowsy	0			
71. Self-assured	0			
72. Mentally alert	0			

BE SURE YOU HAVE ANSWERED EVERY

IMPACT OF EVENT SCALE

Below is a list of comments made by people after stressful life events. Please check each item indicating how frequently these comments were true for you **during the past seven days**. If they did not occur during that time, please mark the 'not at all' column.

	Not at all	Rarely experienced	Sometimes experienced	Often experience
1. I thought about it when I didn't mean to.				
2. I avoided letting myself get upset when I thought about it or was reminded of it.				
3. I tried to remove it from memory.				
4. I had trouble falling asleep or staying asleep				
5. I had waves of strong feelings about it.				
6. I had dreams about it.				
7. I stayed away from reminders of it.				
8. I felt as if it hadn't happened or it wasn't real.				
9. I tried not to talk about it.				
10. Pictures about it popped into my head.				
11. Other things kept making me think about it.				
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.				
13. I tried not to think about it.				
14. Any reminder brought back feelings about it.				
15. My feelings about it were kind of numb.				

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, *41*(3), 209-218.

JUST WORLD SCALE

Please circle the appropriate response below indicating your level of agreement or disagreement with each of the following statements.

1. **I've found that a person rarely deserves the reputation he has.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

2. **Basically, the world is a just place.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

3. **People who get 'lucky breaks' have usually earned their good fortune.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

4. **Careful drivers are just as likely to get hurt in traffic accidents as careless ones.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

5. **It is a common occurrence for a guilty person to get off free in Scottish courts.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

6. **Students almost always deserve the grades they receive in school.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

7. **Men who keep in shape have little chance of suffering a heart attack.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

8. **The political candidate who sticks up for his principles rarely gets elected.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

9. **It is rare for an innocent man to be wrongly sent to jail.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

10. **In professional sports, many fouls and infractions never get called by the referee.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

11. **By and large, people deserve what they get.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

12. **When parents punish their children, it is almost always for good reasons.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

13. **Good deeds often go unnoticed and unrewarded.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

14. **Although evil men may hold political power for a while, in the general course of history good wins out.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

15. **In almost any business or profession, people who do their job well rise to the top.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

16. **Scottish parents tend to overlook the things most to be admired in their children.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

17. **It is often impossible for a person to receive a fair trial in Scotland.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

18. **People who meet with misfortune have often brought it on themselves.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

19. **Crime doesn't pay.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

20. **Many people suffer through absolutely no fault of their own.**

Strongly disagree					Strongly agree
1	2	3	4	5	6

Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues, 31*(3), 65-89.

APPENDIX B

1. One-year Follow-up Bereavement Questionnaire

NO: _____

CONFIDENTIAL

DATE: _____

ONE YEAR FOLLOW-UP BEREAVEMENT QUESTIONNAIRE

1. In the past year, have you found a reason or meaning for the murder occurring?

TICK: ___ **YES - now go to BOX 1a**
___ **NO - now go to BOX 1b**

BOX 1a

I. What is the reason or meaning? _____

_____

_____

BOX 1b

I. Are you still searching and why or why not? _____

_____

_____

2. In the past year, have you asked ""Why me' or 'Why my family'?

TICK: ___ **NO - now go to Question 3**
___ **YES - now go to BOX 2a**

BOX 2a

I. Did you or have you found an answer? If yes, what is it? _____

_____

_____

II. If no, are you still asking and if so, why? _____

_____

_____

3. Why do **YOU** think the murder occurred? _____

_____

_____

4. Why do you think the person or persons who committed the murder did it? _____

_____

_____

5. What sort of person/persons do you think he/they is/are? _____

_____

6. Do you think there are lots of people like that in the world today? _____

_____

7. Do you feel that **<u>your loved one</u>** was responsible in any way for his/her murder?

TICK: ___ **NO**
___ **YES**

7a. Why or why not? _____

_____

8. Do you feel that **<u>you</u>** were responsible in any way for the murder?

TICK: ___ **NO**
___ **YES**

8a. Why or why not? _____

_____

9. <u>At this point in time</u>, do you feel you could have done something so that the murder could have been avoided?

TICK: ___ **YES - now go to BOX 9a**
___ **NO - now go to BOX 9b**

BOX 9a

I. What could you have done? _____

_____

_____

BOX 9b

I. How does this make you feel?

Tick all of the appropriate responses from the list below:

___ angry	___ anxious	___ bitter
___ confused	___ depressed	___ fearful
___ guilty	___ helpless	___ isolated
___ numb	___ out of control	___ rage
___ sad	___ scared	___ shocked
___ sorrow	___ surprised	___ vengeful
___ worried		

II. Others: _____

III. If you were to choose one of the emotions you have indicated above, which one would **BEST REFLECT** how you felt: _____

10. At this point in time, how much do you blame your loved one?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

11. What has caused you **to blame OR not to blame** your loved one? _____

_____

12. At this point in time, how much do you blame yourself?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

13. What has caused you **to blame OR not to blame** yourself? _____

_____

14. At this point in time, how much do you blame someone else?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

14a. Please specify who you blame: _____

15. What has caused you **to blame OR not to blame** someone else? _____

_____

16. At this point in time, how much do you blame the environment/where you live?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

17. What has caused you **to blame OR not to blame** the environment/where you live?

_____

18. At this point in time, how much do you blame society/the way the world is?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

19. What has caused you **to blame OR not to blame** society? _____

_____

20. At this point in time, how much do you blame chance?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5	6
not at all to blame					**blame the most**

21. What has caused you **to blame OR not to blame** chance? _____

_____

22. To what extent do you now feel the murder was caused by something you could have controlled?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5
completely uncontrollable				**completely controllable**

23. What do you feel was controllable or uncontrollable? _____

_____

_____

24. To what extent do you now feel you have control over a similar event happening to yourself in the future?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5
completely uncontrollable				**completely controllable**

25. To what extent do you now feel you have control over a similar event happening to a member of your family in the future?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5
completely uncontrollable				**completely controllable**

26. How likely do you now think it is that you would experience something like this again?

PLEASE CIRCLE THE APPROPRIATE NUMBER:

1	2	3	4	5
extremely likely to				**not at all likely**

27. What emotions are you still experiencing?

I. Tick all of the appropriate responses from the list below:

___ angry	___ anxious	___ bitter
___ confused	___ depressed	___ fearful
___ guilty	___ helpless	___ isolated
___ numb	___ out of control	___ rage
___ sad	___ scared	___ shocked
___ sorrow	___ surprised	___ vengeful
___ worried		

II. Others: _____

III. If you were to choose one of the emotions you have indicated above, which one would **BEST REFLECT** how you currently feel: _____

28. How often do you experience these emotions?

TICK:

___ daily
___ weekly
___ monthly
___ every couple of months
___ not very often

29. Do you think about the murder often?

TICK: ___ **NO - now go to Question 30**
___ **YES - now go to BOX 29a**

BOX 29a

I. How often do you think about it? **Tick appropriate response.**

___ daily
___ weekly
___ monthly
___ every couple of months
___ not very often

II. What do you think about? _____

_____

III. How does it make you feel when you think about it?

Tick all of the appropriate responses from the list below:

___ angry	___ anxious	___ bitter
___ confused	___ depressed	___ fearful
___ guilty	___ helpless	___ isolated
___ numb	___ out of control	___ rage
___ sad	___ scared	___ shocked
___ sorrow	___ surprised	___ vengeful
___ worried		

IV. Others: _____

V. If you were to choose one of the emotions you have indicated above, which one would **BEST REFLECT** how you feel when you think about the murder: _____

30. Do you try to avoid thinking about the murder?

TICK: ___ **NO - now go to Question 31**
___ **YES - now go to BOX 30a**

BOX 30a

I. Why? _____

_____

II. What do you do to avoid thoughts of the murder? _____

_____

_____

31. In the past year, have you sought professional help/counselling?

TICK: ___ **NO - now go to Question 34**
___ **YES - now go to Question 32**

32. From whom have you sought support?

TICK: ___ doctor
___ social worker
___ psychologist
___ psychiatrist
___ support group **please specify:** _____

33. Are you still seeking support?

TICK: ___ **NO**
___ **YES** **a.** From whom? _____

b. How often? _____

34. Please give a brief description of how the murder of your loved one has affected your life in the past year.

_____

_____

_____

35. How seriously would you say you have been affected in the past year by the murder?

TICK:
___ very seriously affected
___ seriously affected
___ fairly seriously affected
___ somewhat affected
___ slightly affected
___ hardly affected at all
___ not affected at all

36. Do you feel differently about yourself now than you did a year ago?

TICK:
___ **NO**
___ **YES** **a.** In what ways? _____

_____

37. In the past year, have your views about the world changed?

TICK:
___ **NO - now go to Bolded Prompt about employment**
___ **YES - now go to Question 38**

38. How have your views changed?

TICK:
___ not safe
___ violent
___ unpredictable
___ no one cares
___ other **please specify:** _____

IF EMPLOYED, ANSWER QUESTIONS 39 & 40.
IF NOT EMPLOYED, GO TO QUESTION 41.

39. In the past year, has your job performance been affected?

TICK: ___ **NO**
___ **YES** **a.** In what ways? _____

_____

b. For how long? _____

c. Is it still affected now? _____

40. In the past year, have your boss and/or co-workers been supportive?

TICK: ___ **YES - now go to BOX 40a**
___ **NO - now go to BOX 40b**

BOX 40a

I. How were they supportive? _____

II. How long did this support last? _____

III. Are they still supportive now? _____

BOX 40b

I. How were they unsupportive? _____

II. How did this make you feel?

Tick all of the appropriate responses from the list below:

___ angry	___ anxious	___ bitter
___ confused	___ depressed	___ fearful
___ guilty	___ helpless	___ isolated
___ numb	___ out of control	___ rage
___ sad	___ scared	___ shocked
___ sorrow	___ surprised	___ vengeful
___ worried		

III. Others: _____

IV. If you were to choose one of the emotions you have indicated above, which one would **BEST REFLECT** how you felt about the lack of support: _____

41. In the past year, has your social life been affected?

TICK: ___ **NO**
___ **YES** **a.** In what ways? _____

_____

b. For how long? _____

c. Is it still affected now? _____

42. In the past year, have your neighbours been supportive?

TICK: ___ **YES - now go to BOX 42a**
___ **NO - now go to BOX 42b**

BOX 42a

I. How were they supportive? _____

II. How long did this support last? _____

III. Are they still supportive? _____

BOX 42b

I. How were they unsupportive? _____

II. How did this make you feel?

Tick all of the appropriate responses from the list below:

___ angry	___ anxious	___ bitter
___ confused	___ depressed	___ fearful
___ guilty	___ helpless	___ isolated
___ numb	___ out of control	___ rage
___ sad	___ scared	___ shocked
___ sorrow	___ surprised	___ vengeful
___ worried		

III. Others: _____

IV. If you were to choose one of the emotions you have indicated above, which one would **BEST REFLECT** how you felt about the lack of support: _____

43. In the past year, have you experienced any of the following?

TICK:

___ could not eat
___ ate more than usual
___ could not sleep
___ could not get up
___ trouble staying asleep
___ nightmares
___ feelings of revenge
___ anger at your loved one for dying

43a. If you ticked any of the above, please tick <u>which ones</u>, if any, are still occurring now and <u>how often</u>:

TICK:					
___ could not eat	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ ate more than usual	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ could not sleep	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ could not get up	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ trouble staying asleep	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ nightmares	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ feelings of revenge	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**
___ anger at loved one	**__ daily**	**__ weekly**	**__ monthly**	**__ yearly**

44. In the past year, did you experience heightened emotions at any of the following times?

TICK:
___ anniversary of death
___ birthdays
___ Christmas
___ holidays
___ other **please specify:** _____

44a. If you ticked any of the above, please explain how you felt on those days and what you did to cope: _____

_____

_____

45. In the past year, have your relationships with your family and/or friends changed?

TICK:
___ **NO**
___ **YES** **a.** Which ones have changed and how? _____

_____

_____

46. In the past year, do you feel people have looked at you or treated you differently?

TICK:
___ **NO**
___ **YES** **a.** In what ways? _____

b. How has this affected you? _____

_____

47. In the past year, how do you feel you have been coping?

TICK:
___ **GOOD**
___ **BAD**

48. Why do you feel you are coping either good or bad?

_____

_____

_____

49. In the past year, would you say your health has been affected:

TICK:

___ very badly
___ quite badly
___ somewhat badly
___ hardly at all
___ not at all

50. In the past year, have you experienced any of the following physical symptoms?

I. Tick all of the appropriate responses from the list below:

___ aches/pain in body
___ backache
___ constipation
___ diarrhoea
___ fast heart rate
___ fatigue
___ gain of weight
___ headaches
___ heart attack
___ heart palpitations
___ vomiting
___ high blood pressure
___ hot/cold spells
___ indigestion
___ loss of weight
___ loss of energy
___ nausea
___ numbness in arms
___ numbness in hands
___ numbness in legs
___ pain in ears
___ pains in head
___ pains in stomach
___ shaky hands
___ shaky legs
___ shortness of breath
___ sore throat
___ stroke
___ sweating
___ tightness in chest
___ tightness in head

II. Others: _____

III. If you were to choose one of the symptoms you have indicated above, which one would **BEST REFLECT** your principle ailment: _____

51. Did you seek help for the symptoms from a doctor or other health professional?

TICK: ___ **NO**

↘

a. Why? _____

___ **YES**

↘

b. Diagnosis/medication prescribed? _____

_____

52. Are any of these symptoms still occurring?

TICK: ___ **NO**
___ **YES** **a.** Which ones and for how long? _____

_____

_____

53. What do **YOU** think caused these symptoms? _____

_____

54. In the past year, are there things you do now which you did not do last year?

TICK: ___ **NO**
___ **YES** **a.** What things? _____

_____

55. In the past year, are there things which you do not do anymore that you did last year?

TICK: ___ **NO**
___ **YES** **a.** What things? _____

_____

56. Do you feel that you have or will be able to reconstruct your life to be meaningful again?

TICK: ___ **NO**

↘

a. Why? _____

___ **YES**

↘

b. How have you or will you accomplish this? _____

_____

57. In the past year, do you feel you have been affected differently than other family members?

TICK: ___ **NO**

___ **YES** **a.** Why and how do you feel you were affected differently? _____

_____

58. In the past year, have you experienced any of the following negative life events?

TICK:

___ losing a job
___ moving
___ divorce
___ death of someone close to you
___ crime **please specify:** _____
___ other **please specify:** _____

58a. If you ticked any of the above, please explain how long ago it happened: _____

_____

59. Any additional comments? _____

_____

_____

_____

_____

*****THANK YOU SO VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE. YOUR HELP IS GREATLY APPRECIATED.*****

APPENDIX C

1. Subject Consent Form
2. Demographic Information/Packet Instructions
3. Visual Analogue Mood Scale
4. Positive and Negative Affect Schedule
5. Instructions For Self-Blame Writing Exercise Condition
6. Instructions For Other-Blame Writing Exercise Condition
7. Instructions For No Blame/Control Writing Exercise Condition
8. Instructions For Positive Mood Induction Writing Exercise
9. Pilot Study Results and Discussion

UNIVERSITY OF ST ANDREWS
SCHOOL OF PSYCHOLOGY
SUBJECT CONSENT FORM

Experiment: Cognitive Induction of Blame Attributions and its Effects on Mood

Experimenter: Stacy Kahler

The purpose of this form is to ensure that you are willing to take part in this study and that you understand what it entails. Signing this form does not commit you to anything you do not wish to do.

Has the experimenter explained the study?	Yes/No
Have you had the opportunity to ask questions and discuss the study?	Yes/No
Have you received satisfactory answers to your questions?	Yes/No
Do you understand that you are free to withdraw from the study:	
* at any time * without having to give a reason?	Yes/No

I agree to take part in this study.

Subject

Name: _____ Signature: _____

Witness

Name: Stacy Kahler Signature: _____

Date: _____

PACKET # _____

AGE: _____

GENDER: _____

Please follow the instructions of the experimenter and those on each of the pages in this packet.

All information provided in this packet will be kept **strictly confidential**.

MOOD ASSESSMENT

Please mark, with a vertical line, each of the twelve visual analogue scales at a position that would correspond to you **CURRENT** mood.

1.	Not at all Composed	_____	Very Composed
2.	Not at all Confident	_____	Very Confident
3.	Not at all Depressed	_____	Very Depressed
4.	Not at all Confused	_____	Very Confused
5.	Not at all Agreeable	_____	Very Agreeable
6.	Not at all Energetic	_____	Very Energetic
7.	Not at all Anxious	_____	Very Anxious
8.	Not at all Unsure	_____	Very Unsure
9.	Not at all Elated	_____	Very Elated
10.	Not at all Clear-headed	_____	Very Clear-headed
11.	Not at all Hostile	_____	Very Hostile
12.	Not at all Tired	_____	Very Tired

POSITIVE AND NEGATIVE AFFECT SCHEDULE

Name:.....

Date:..... **Record Number:**.....

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent* .....

Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	*a little*	*moderately*	*quite a bit*	*extremely*

.....interested
.....distressed
.....excited
.....upset
.....strong
.....guilty
.....scared
.....hostile
.....enthusiastic
.....proud
.....irritable
.....alert
.....ashamed
.....inspired
.....nervous
.....determined
.....attentive
.....jittery
.....active
.....afraid

*Insert appropriate time instructions above from page 27

CONFIDENTIAL

Please write about a traumatic and upsetting experience for which you were to blame.

Write about what happened and your thoughts and feelings.

CONFIDENTIAL

Please write about a traumatic and upsetting experience for which somebody other than you was to blame. Write about what happened and your thoughts and feelings.

CONFIDENTIAL

Please write about a traumatic and upsetting experience for which nobody was to blame. Write about what happened and your thoughts and feelings.

CONFIDENTIAL

Please write about a pleasant experience for which you were most proud of the outcome. Write about what happened and your thoughts and feelings.

PILOT STUDY RESULTS & DISCUSSION

RESULTS

Subject responses to the writing exercises were examined in order to determine whether they had followed directions. The Table 1 reports a description of the subject responses.

Table 1. Description of Subject Responses on Writing Exercise

Subject Number	Condition	Type of Response
1	Self-Blame	Described event; very short response; did not describe blame
2	Self-Blame	Described event; short response; did not describe blame
3	No Blame	Described event; short response; did not describe feelings
4	Other-Blame	Described event; moderate length response; did not describe feelings
5	Other-Blame	Described event and feelings; short response
6	No Blame	Described event; short response; did not describe feelings
7	No Blame	Described event and feelings; moderate length response
8	Other-Blame	Described event and feelings; moderate length response; blamed self
9	Self-Blame	Described event and feelings; moderate length response

Subject responses were short with most using only one to one-and-a-half sheets of paper. Subjects mostly described the experience and did not describe their emotions

or feelings about the experience event though they were not specifically instructed to do so. It was, however, desired for the subjects to describe their feelings which accompanied the traumatic and upsetting experience. Most subjects did not describe their blame attributions which again was desired.

Reliability analyses were carried out on the negative and positive affect scale of the two mood measures (VAS & PANAS) to assess the level of internal consistency for both Time 1 (pre-test) and Time 2 (post-test). All of the negative and positive affect scale measures were of an acceptable level with Cronbach's alpha of >.6. The individual Cronbach alpha scores are presented in Table 2.

Table 2. Reliability Analyses with Cronbach's Alpha

TIME 1

Measure	*Cronbach's Alpha*
VAS Negative Affect	.84
VAS Positive Affect	.93
PANAS Negative Affect	.85
PANAS Positive Affect	.89

TIME 2

Measure	*Cronbach's Alpha*
VAS Negative Affect	.81
VAS Positive Affect	.73
PANAS Negative Affect	.85
PANAS Positive Affect	.90

Repeated measures ANOVAs were conducted in order to determine whether a manipulation of blame occurred, as well as whether main effects and interactions between condition (blame), gender and time occurred. Results for the four repeated measures ANOVAs, using the four mood measures (VAS NA, VAS PA, PANAS, NA & PANAS PA) indicated that there were no main effects of condition, gender or time. Further no two or three way interactions occurred between condition, gender or time. These results indicated that the manipulation did not occur.

DISCUSSION

The overall outcome of the pilot study was favourable. The reliability of the constructed measure (VAS) and the standardised measure (PANAS) was acceptable with Cronbach alphas of >.6. Although the responses to the writing exercises were short, subjects were describing traumatic and upsetting experiences and following directions. The manipulation of blame cognitions did not work, however, which may be accounted for by the very small sample size and the lack of subjects writing about their emotions and blame attributions related to their traumatic and upsetting experiences.

Based on the subject responses to the writing exercised and their verbal comments about the study and its instructions, several changes were made to the materials and instructions for the laboratory study. As several subjects stated that they had a difficult time determining the "*most*" traumatic and upsetting experience of their life, it was decided to change the instructions to writing about "*a*" traumatic and upsetting experience. As most subjects did not write about their blame attributions or their feelings and emotions related to their experience, the instructions for all three conditions were amended to include the sentence: "Write about what happened and your thoughts and feelings."

As most subjects did not write for the full ten minutes, the verbal instructions for the writing exercise were changed. Instead of telling subjects they "*had*" ten minutes to write on the assigned topic, subjects will instead be told that they "*are to write*" for ten minutes on the assigned topic.

In addition, several subjects appeared to be concerned about the amount of paper provided in the packet for the writing exercise (e.g., flipping through the pages, sighing, etc.). Although no discussions emerged about the number of blank pages presented, the amount of paper for the writing exercise was decreased from six sheets to three pages in total (one with instructions at the top and two blank sheets.).

The aim of these changes is to ensure that subjects think and write more about their experiences with regards to their blame attributions and feelings and emotions in order to provide the correct environment for the potential change in negative and positive affect.